

Global Electronics Retailer

A big company that sells electronics in many countries

• Our Team



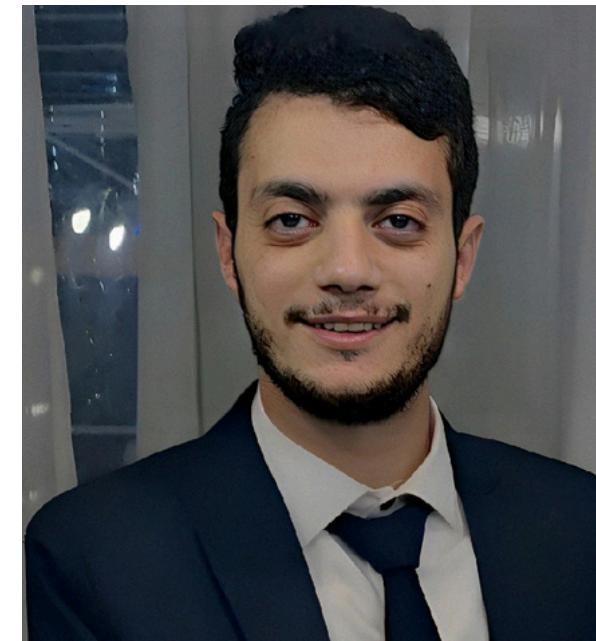
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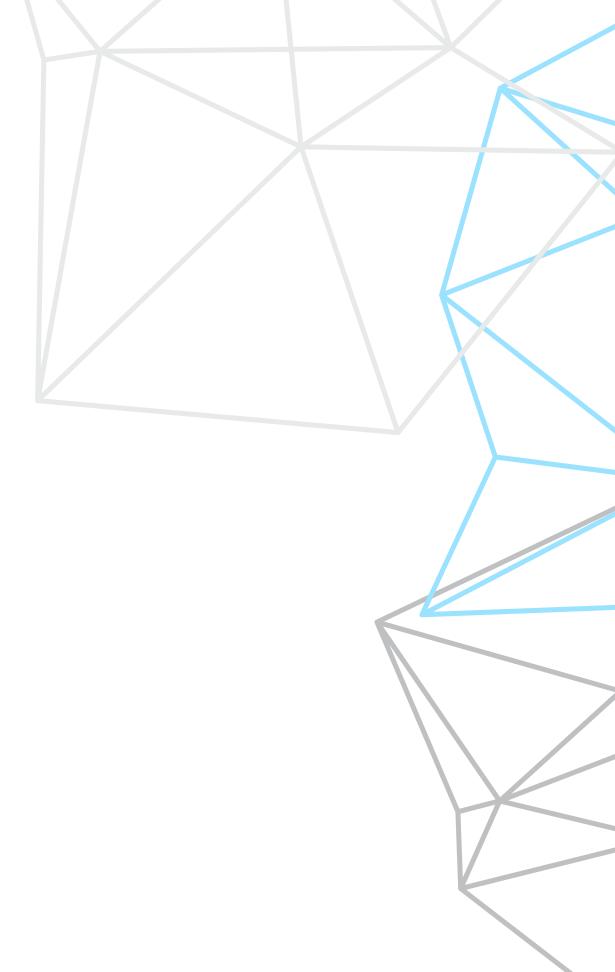
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• Overview

- ▶ Introduction
 - ▶ Project objectives
 - ▶ ERD & Mapping
 - ▶ Database Creation
 - ▶ Stored Procedure
 - ▶ (DWH) & (SSIS)
 - ▶ Reports(SSRS)
 - ▶ Analysis(SSAS)
 - ▶ Power BI Dashboards
 - ▶ Tablaue Dashboards
 - ▶ Product Discovery Through AI
- 

- # Introduction



Global Electronics Retailer is one of the important companies in the retail field on three continents. It expanded its business in many areas since 2016. The company continued to provide its products and services until 2021, and then it closed. By looking at the data from this time, we will see the main trends that affected the company's performance and learn lessons from its business journey.

• Project Objectives



Develop Data Analysis System

Build a secure system for analyzing sales data.



Automate Data Processing

Automate report generation and data cleaning.



Create Dashboards

Provide visual reports for sales metrics.

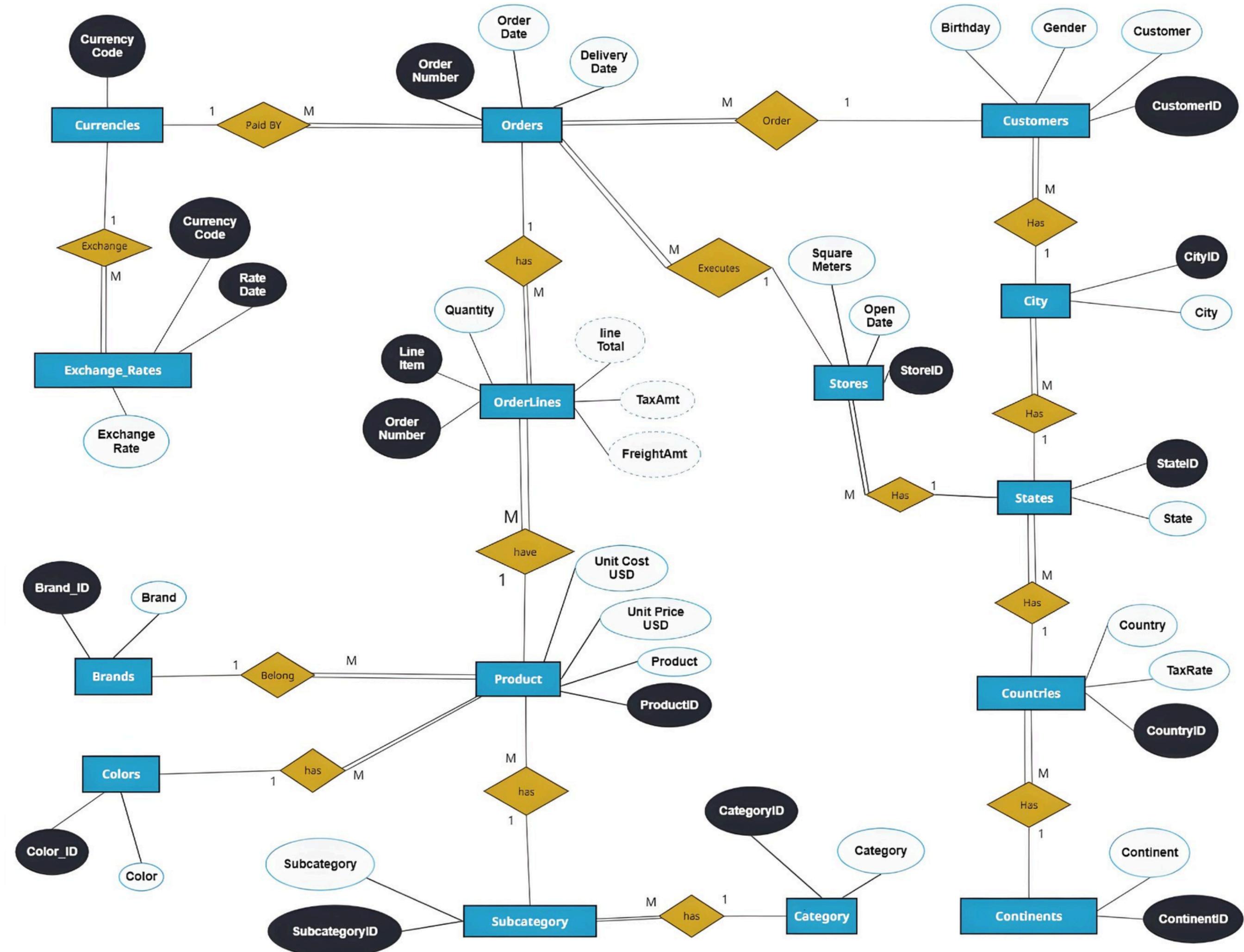


Implement Role-Based Access

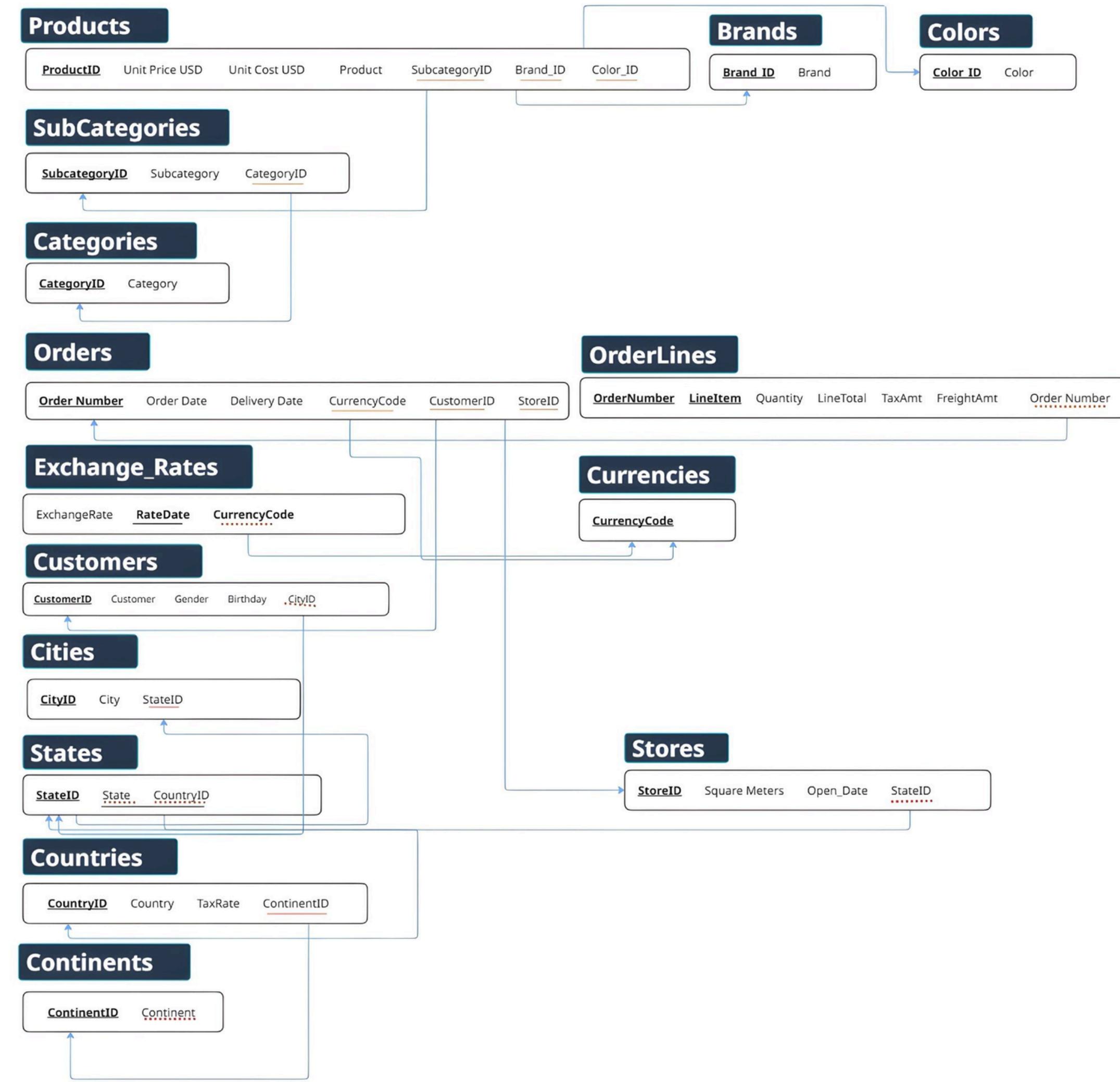
Optimize Customer Insights

ERD & Mapping

• ERD •



● Mapping



DataBase implementation

● Database Creation || Create Tables

```
CREATE DATABASE [Global_Electronics_Retailer];
```

● Regions

● Continents

```
create table Continents
(
    ContinentID int primary key ,
    Continent varchar(50)
)
```

● Countries

```
create table Countries
(
    CountryID int primary key ,
    Country varchar(50),
    TaxRate decimal (5,4),
    ContinentID int,
    foreign key (ContinentID) references Continents(ContinentID)
)
```

● States

```
create table States
(
    StateID int primary key,
    State varchar(100),
    CountryID int,
    foreign key (CountryID) references Countries(CountryID)
)
```

● Cities

```
create table Cities
(
    CityID int primary key,
    City varchar(100),
    StateID int,
    foreign key (StateID) references States(StateID)
)
```

● Create Tables

● Customers

```
create table Customers
(
    CustomerID int primary key,
    Customer varchar(100),
    Gender varchar(10),
    Birthday date,
    CityID int,
    foreign key (CityID) references Cities(CityID)
)
```

● Stores

```
create table Stores
(
    StoreID int primary key,
    Square_Meters decimal (10,2),
    Open_Date date ,
    StateID int,
    foreign key (StateID) references States(StateID)
)
```

● Products

● Categories

```
create table Categories
(
    CategoryID int primary key,
    Category varchar(100)
)
```

● Brands

```
create table Brands
(
    BrandID int primary key,
    Brand varchar(100)
)
```

● Colors

```
create table Colors
(
    ColorID int primary key,
    Color varchar(50)
)
```

● SubCategories

```
create table Subcategories
(
    SubcategoryID int primary key,
    Subcategory varchar(100),
    CategoryID int,
    foreign key (CategoryID) references Categories(CategoryID)
)
```

● Products

```
create table Products
(
    ProductID int primary key,
    Product nvarchar(MAX),
    Unit_Cost_USD decimal (10,2),
    Unit_Price_USD decimal (10,2),
    BrandID int,
    ColorID int,
    SubcategoryID int,
    foreign key (SubcategoryID) references Subcategories(SubcategoryID),
    foreign key (BrandID) references Brands(BrandID),
    foreign key (ColorID) references Colors(ColorID)
)
```

● Orders

● Orders

```
create table Orders
(
    OrderNumber int primary key,
    OrderDate date,
    DeliveryDate date,
    CustomerID int,
    StoreID int,
    CurrencyCode varchar(10),
    OfflineOrderFlag as (case when StoreID = 0 then 0 else 1 end) persisted,
    foreign key (CustomerID) references Customers(CustomerID),
    foreign key (StoreID) references Stores(StoreID),
    foreign key (CurrencyCode) references Currencies(CurrencyCode)
)
```

● Currencies

```
create table Currencies
(
    CurrencyCode varchar(10) primary key
)

create table ExchangeRates
(
    RateDate date,
    CurrencyCode varchar(10),
    ExchangeRate decimal (10,4),
    primary key (RateDate, CurrencyCode),
    foreign key (CurrencyCode) references Currencies(CurrencyCode)
)
```

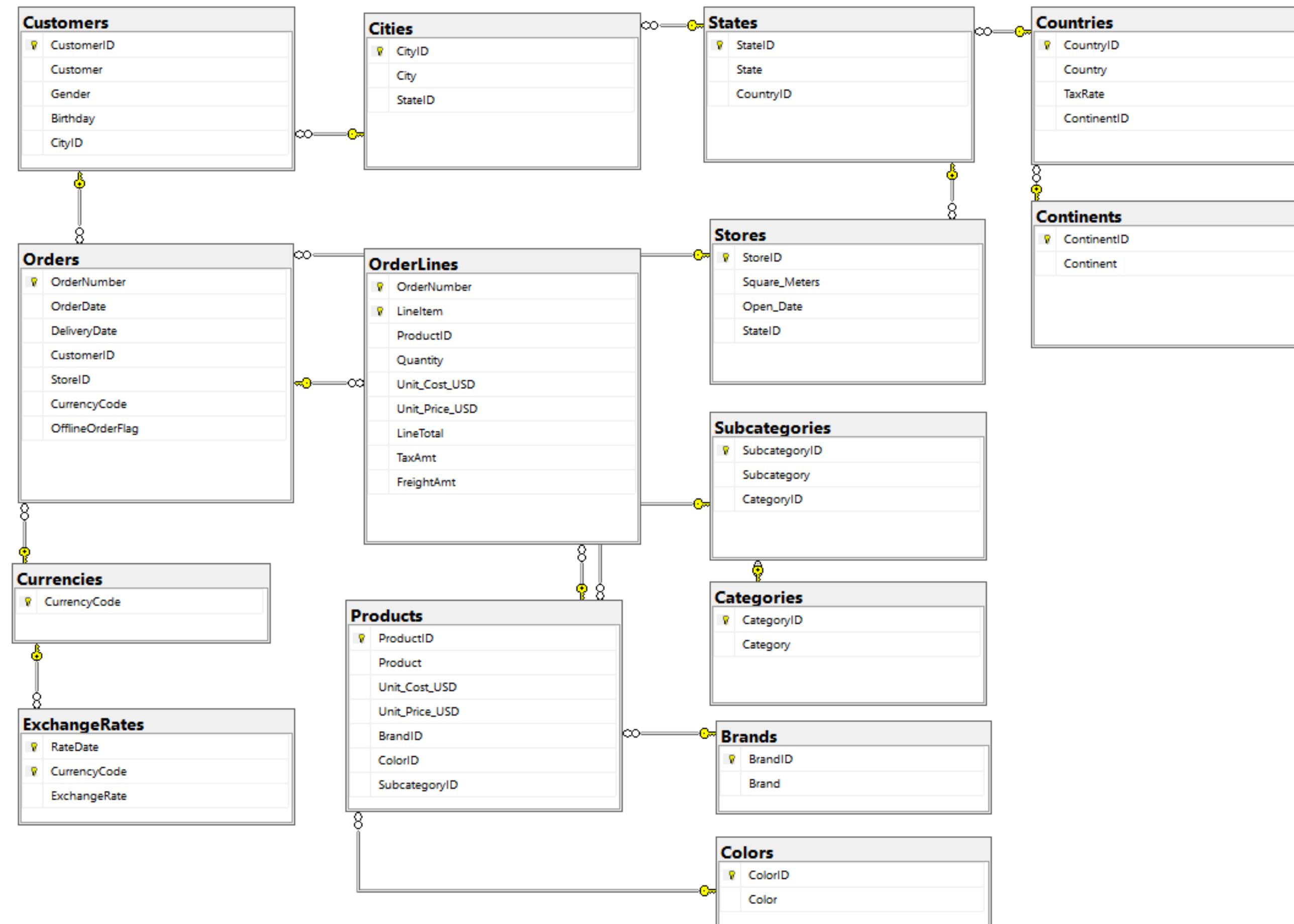
● OrderLines

```
create table OrderLines
(
    OrderNumber int,
    LineItem int,
    ProductID int,
    Quantity int ,
    primary key (OrderNumber, LineItem),
    foreign key (OrderNumber) references Orders(OrderNumber),
    foreign key (ProductID) references Products(ProductID)
)
```

● Alter Order Line

```
alter table OrderLines add
    LineTotal decimal(18,2),      -- Quantity * Unit_Price_USD
    TaxAmt decimal(18,4),        -- LineTotal * TaxRate
    FreightAmt decimal(18,2)     -- If order is offline = 80 / # LineItems
```

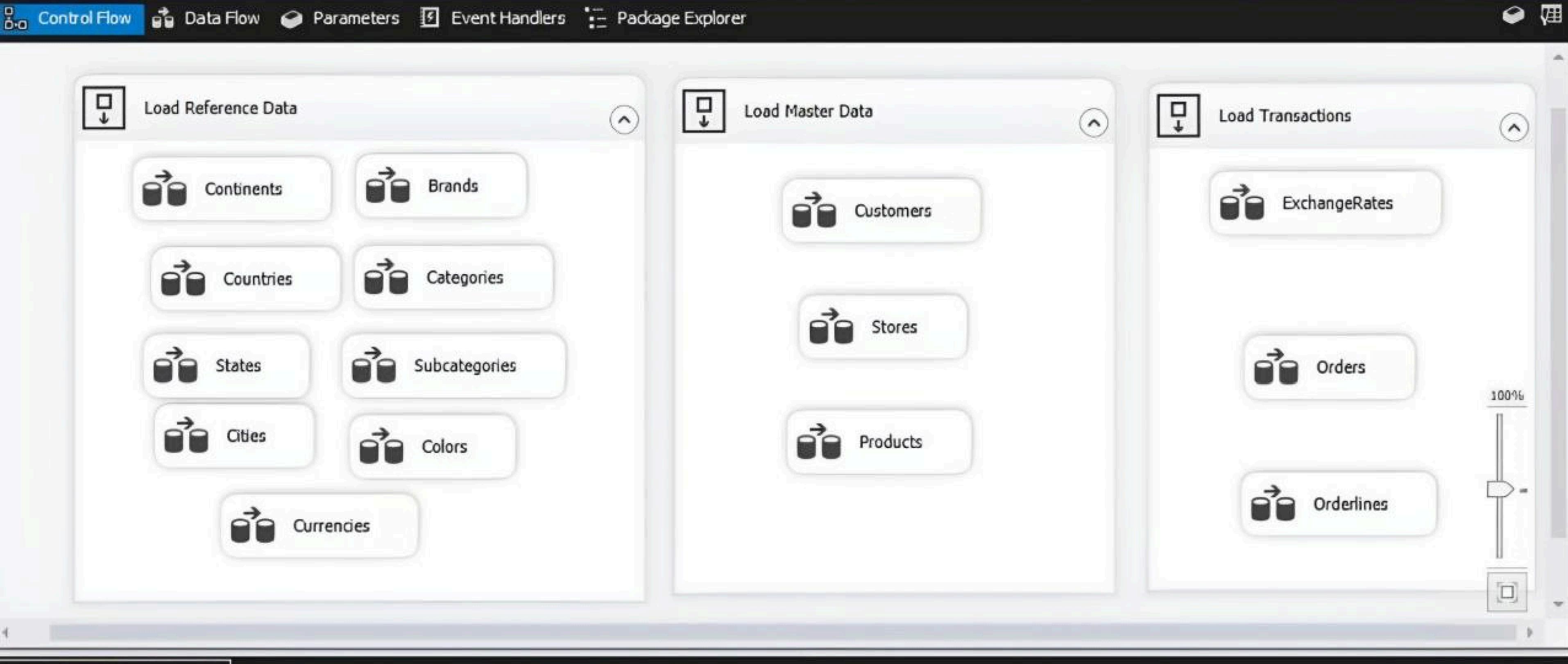
● DataBase Diagram



ETL (OLTP)

Inserting Values Using **(SSIS)**

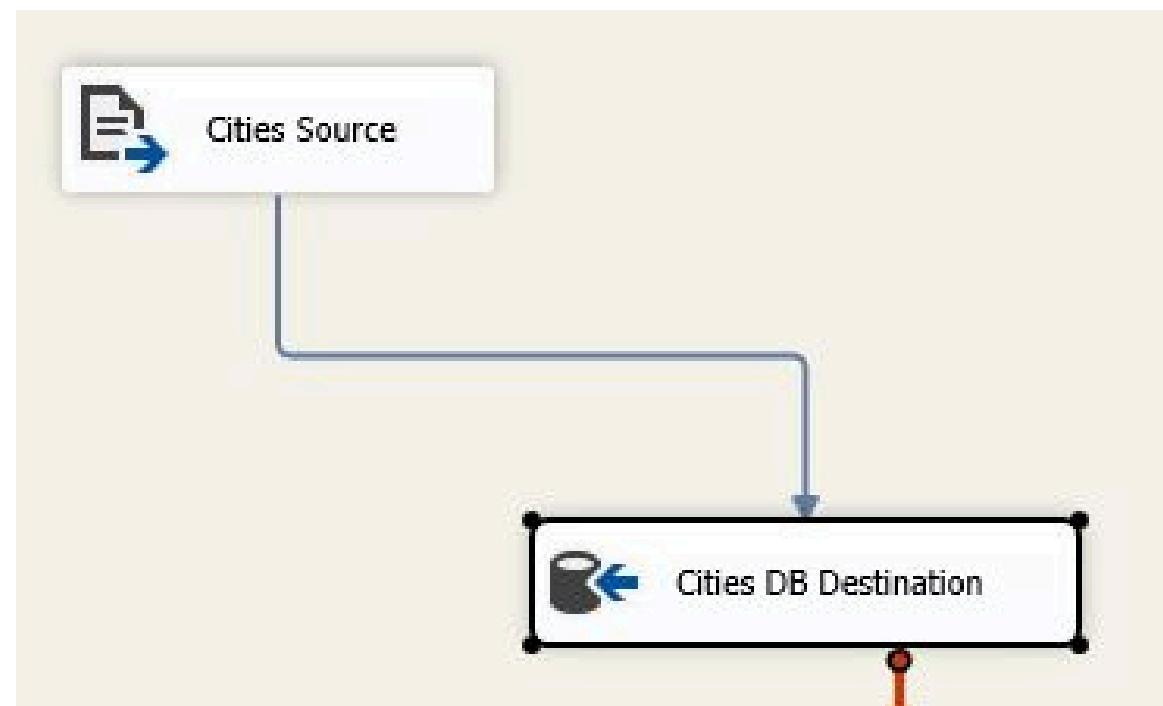
● Data Flow Task



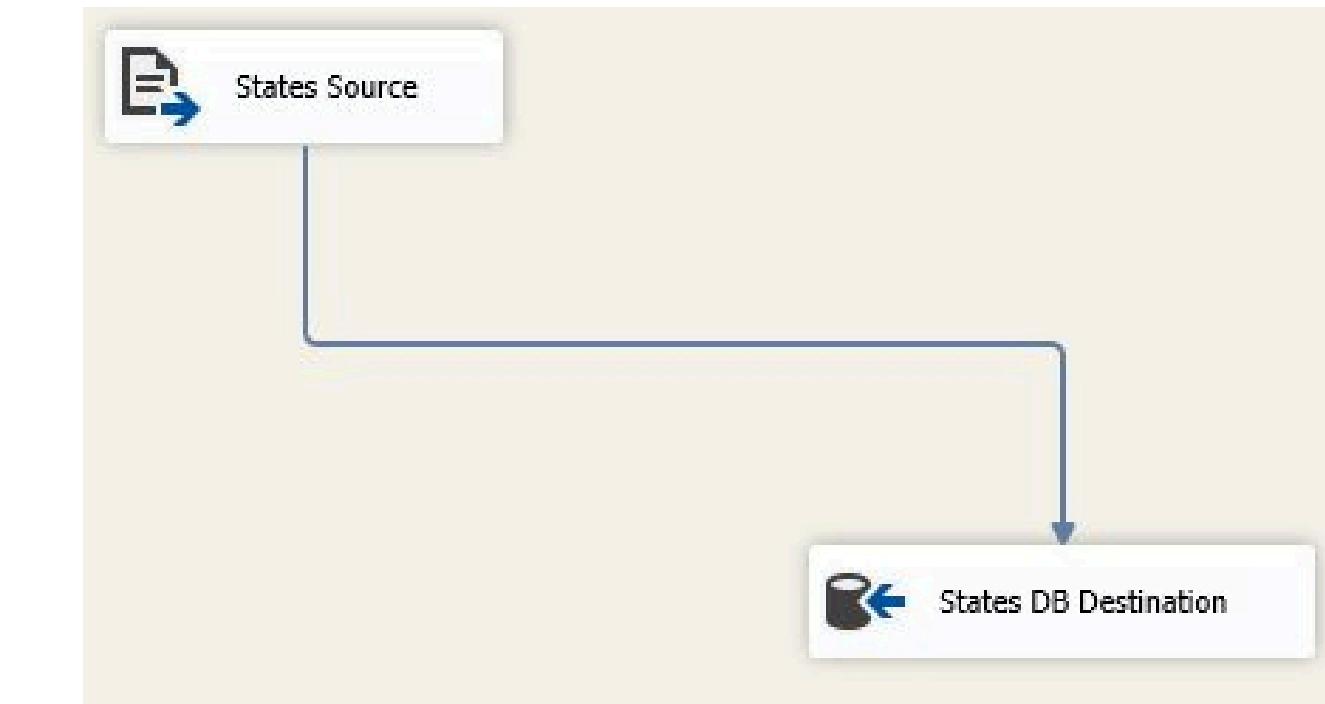
Connection Managers

Brands	Categories	Cities	Colors	Continents	Countries	Currencies	customer	DESKTOP-CBL6IVL.Global Electronics Retailer	ExchangeRates	Orderlines
Orders	Products	Products3	States	Stores	Subcategories					

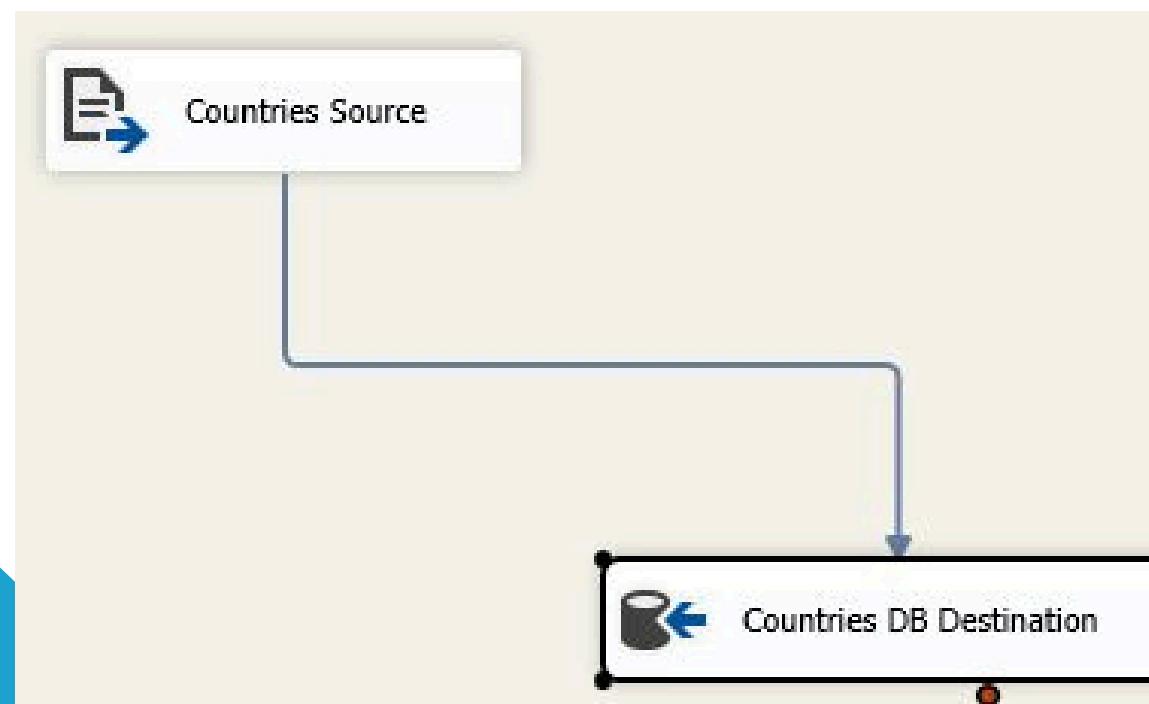
● Cities



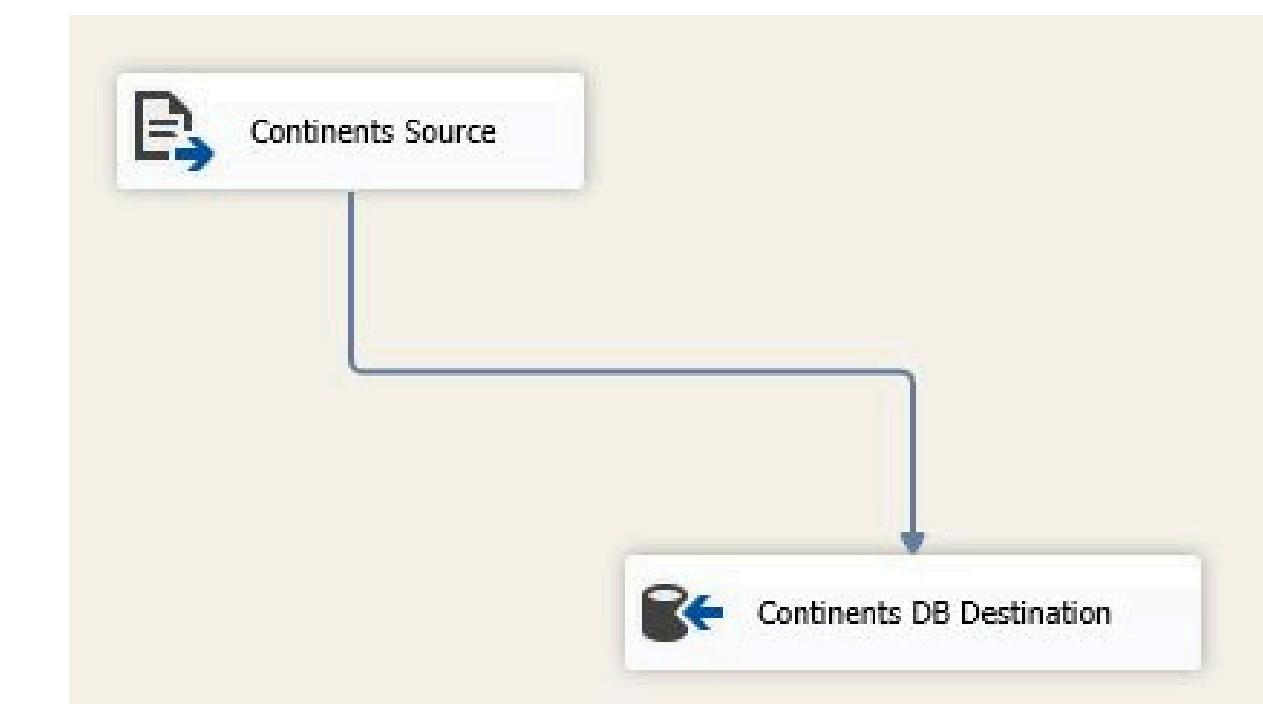
● States



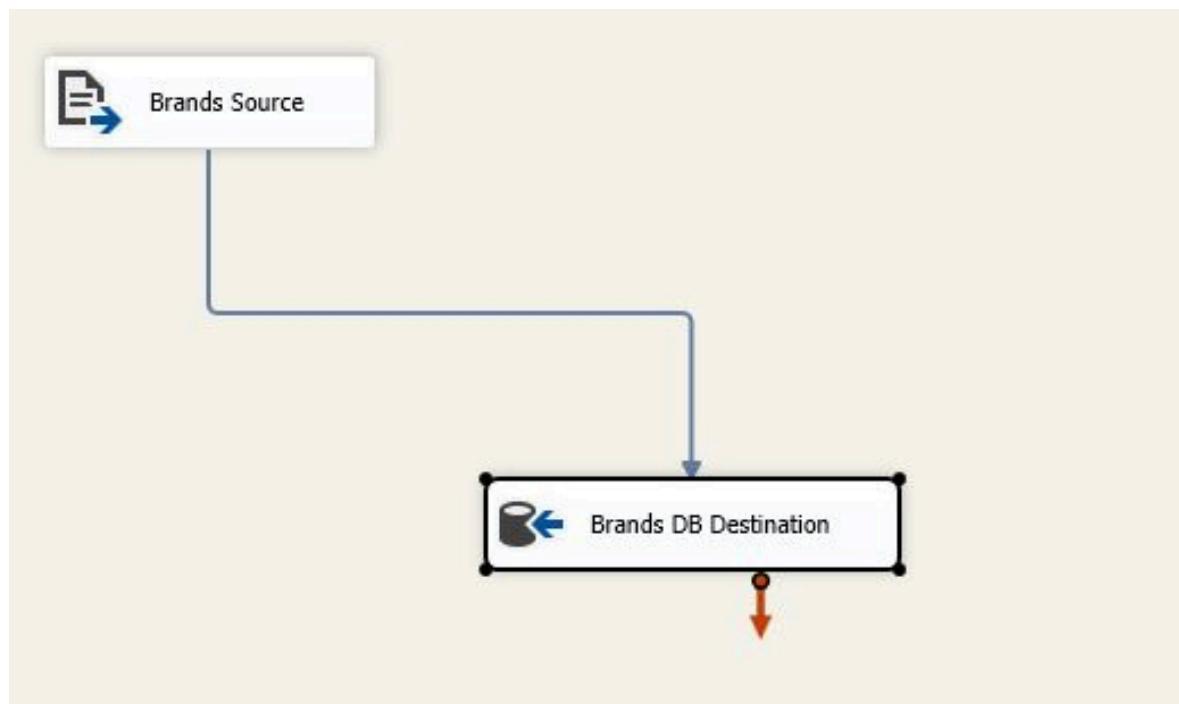
● Countries



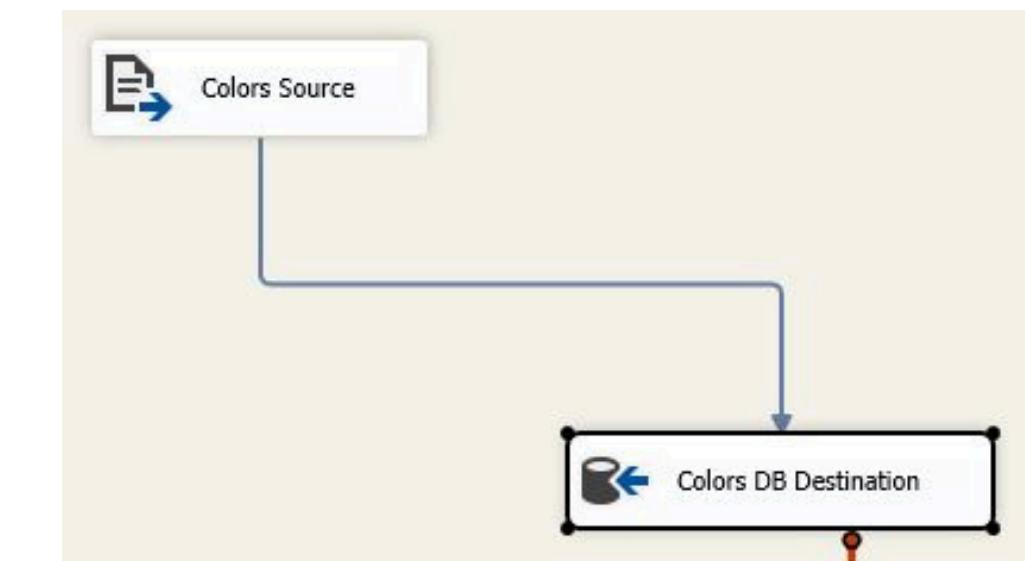
● Containets



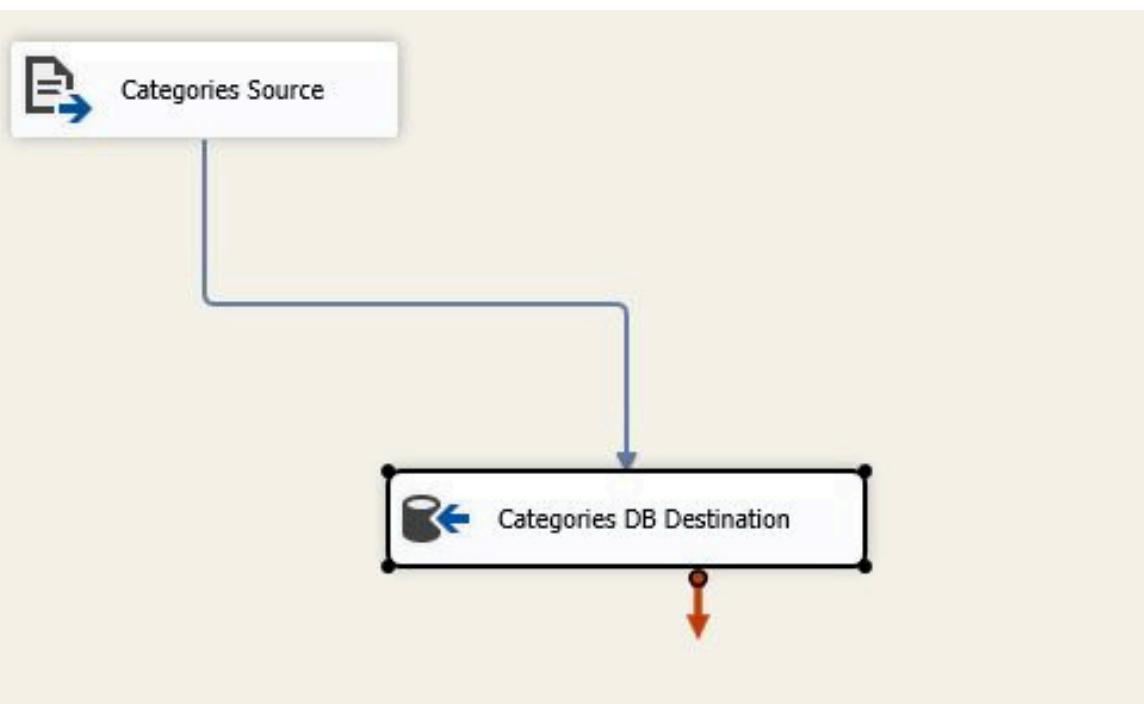
● Brands



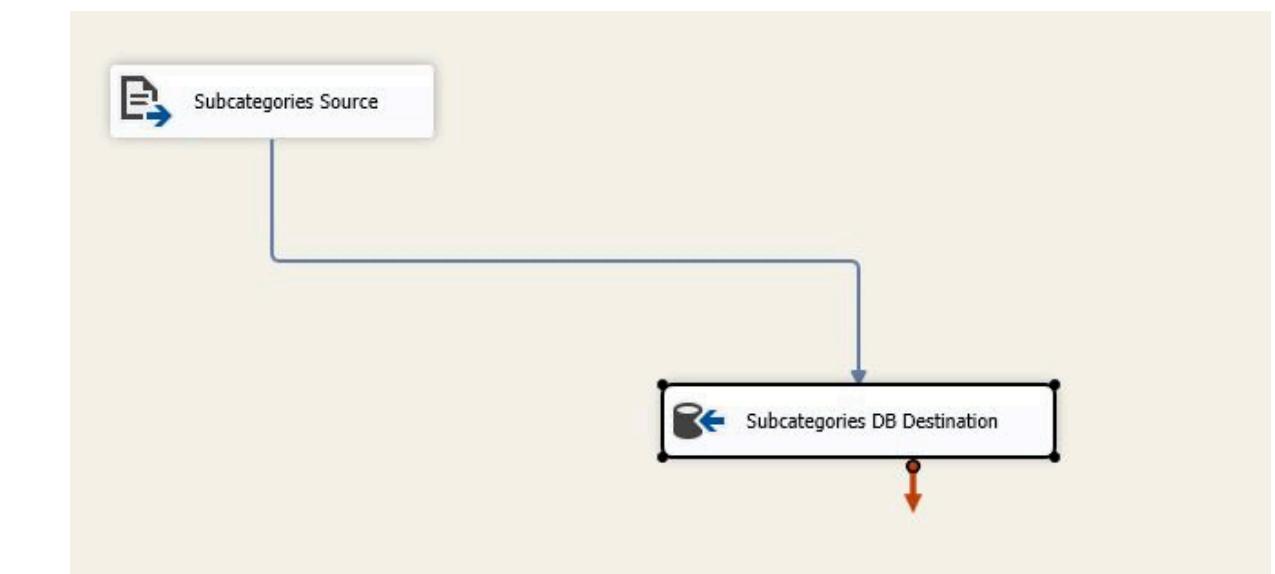
● Colors



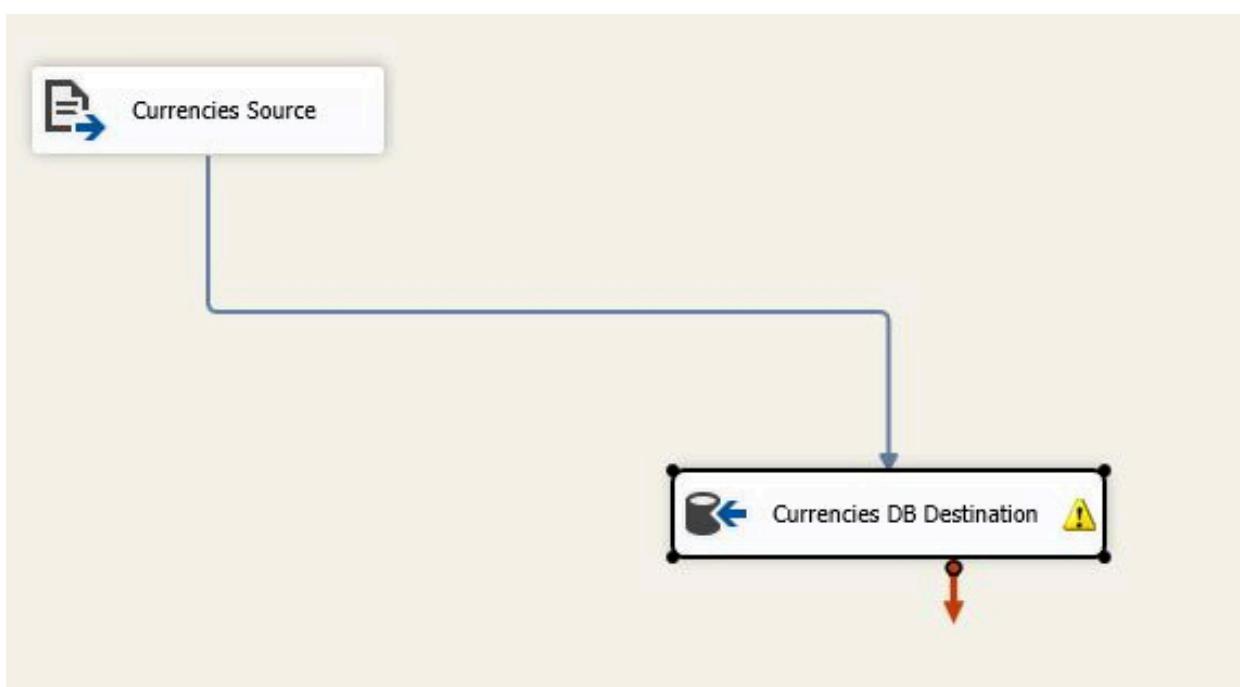
● Categories



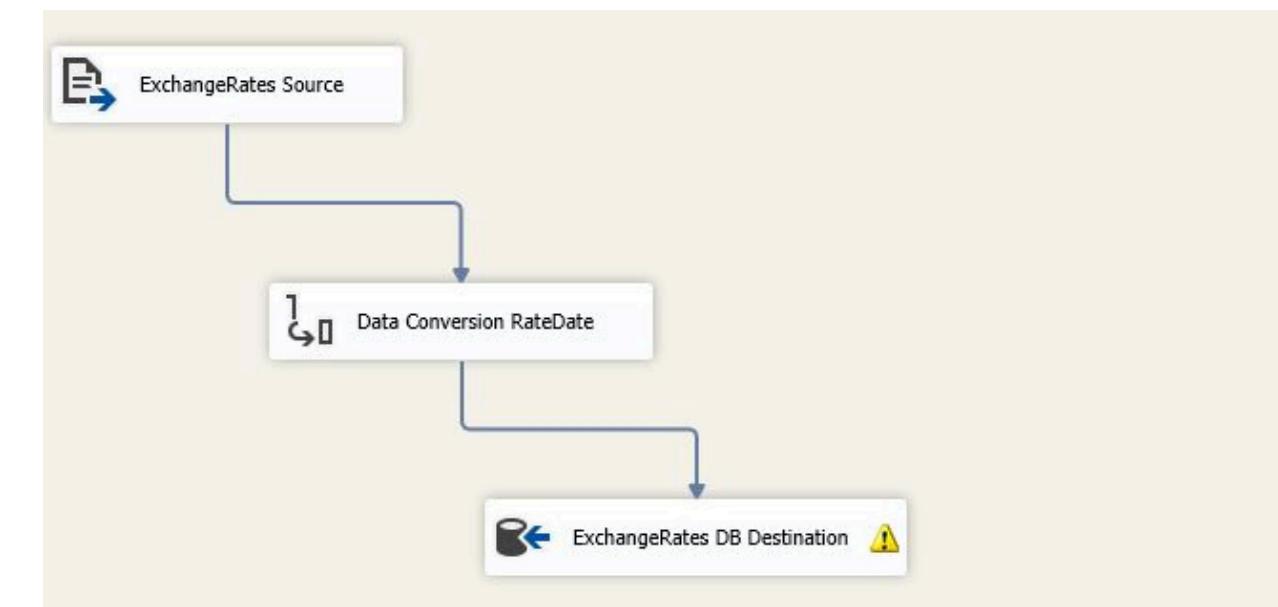
● Subcategories



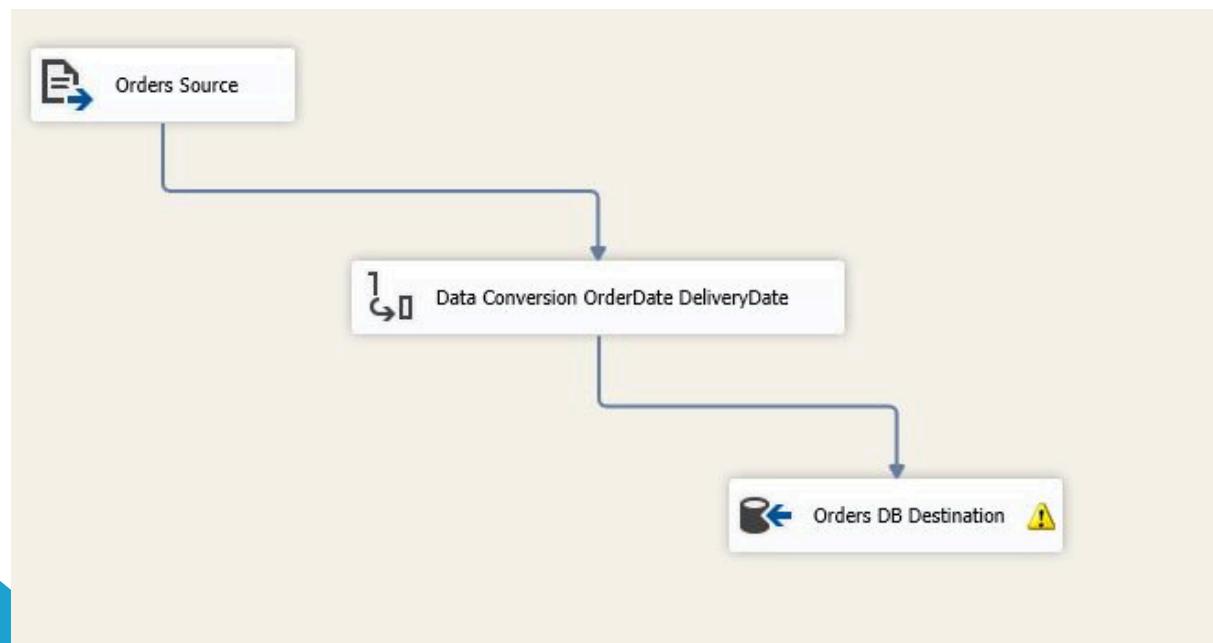
● Currencies



● ExchangeRates



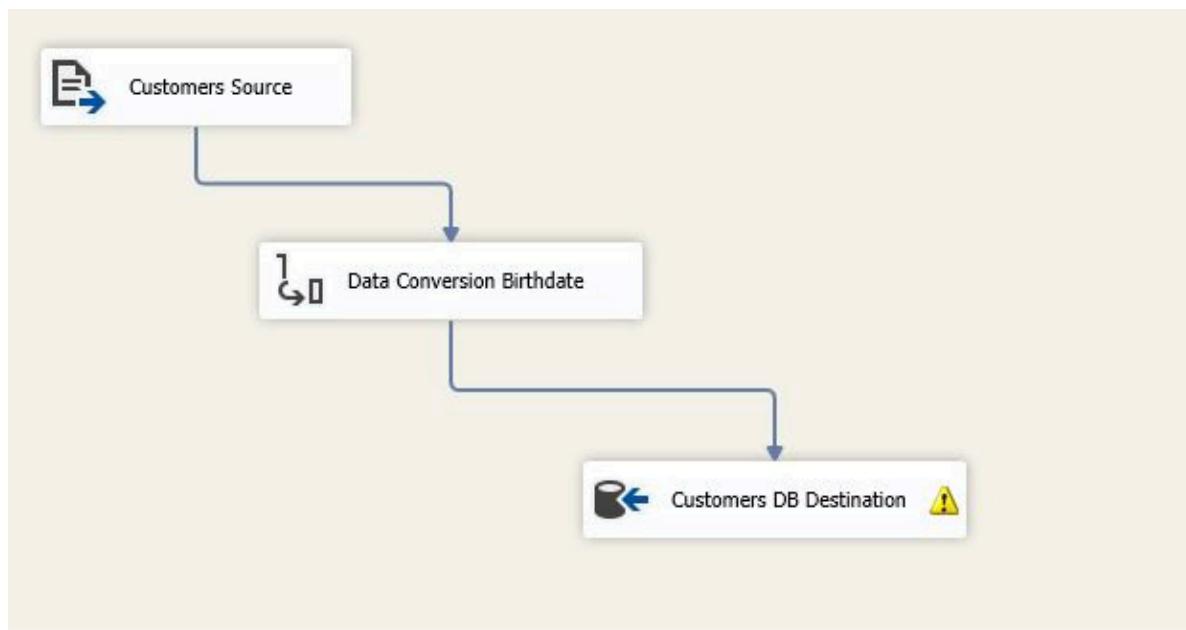
● Orders



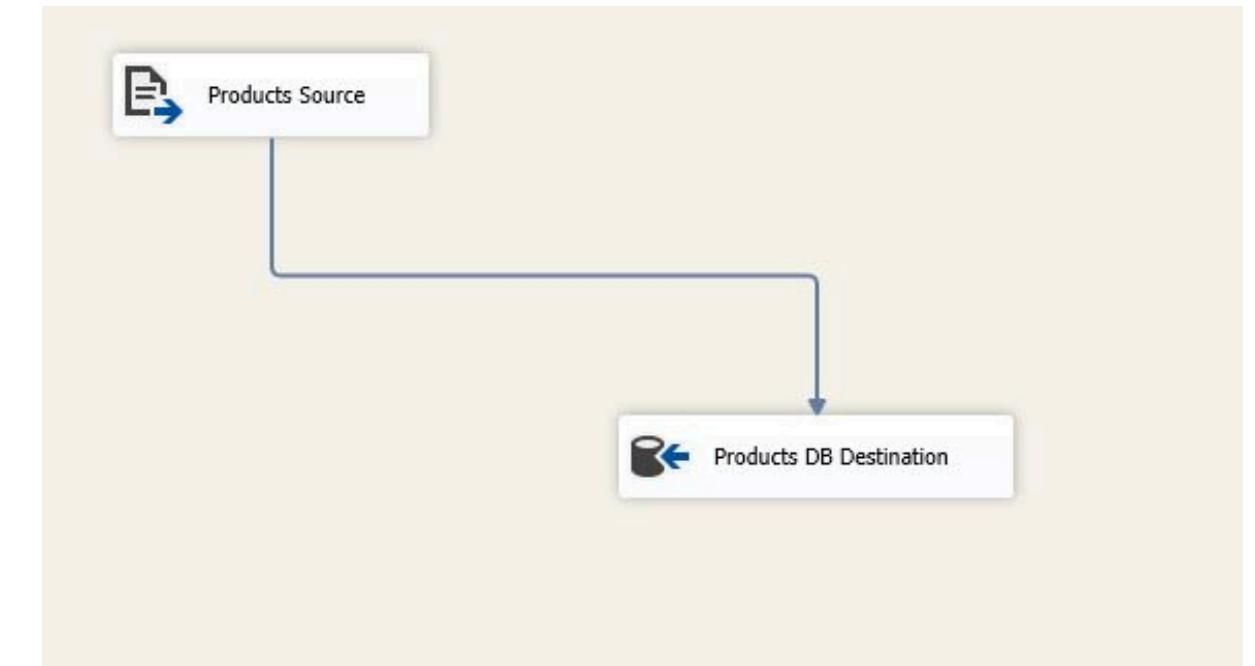
● OrderLines



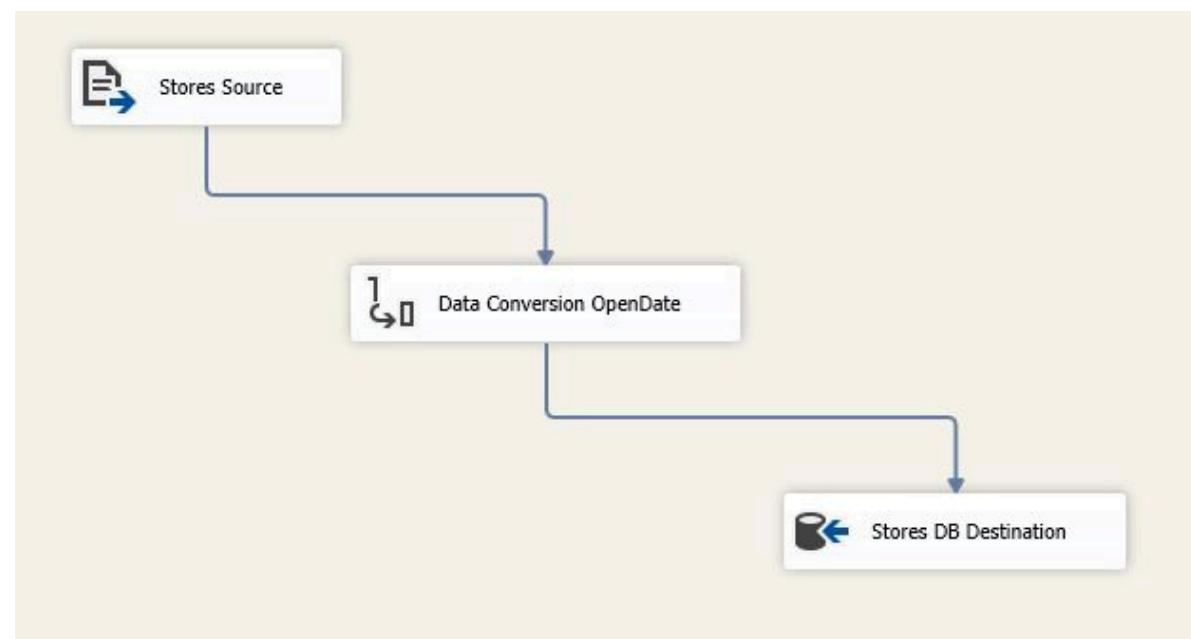
● Customers

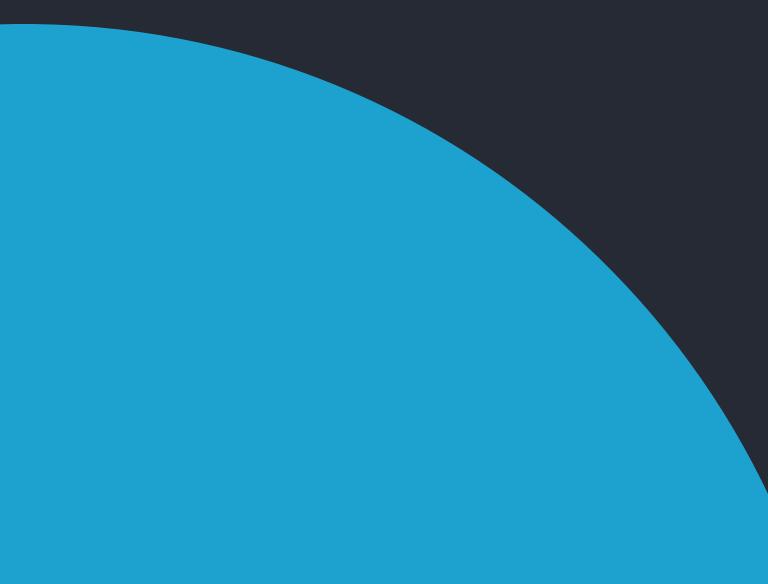


● Products



● Stores





Views & Stored Proc & Triggers

● Triggers

● Update LineTotals, Tax, Freight

```
create or alter trigger OrderLines_updated_column
on OrderLines
After insert
as
begin

    update ol
    set ol.LineTotal = i.Quantity * p.Unit_Price_USD
    from OrderLines ol
    Join inserted i on ol.OrderNumber = i.OrderNumber and ol.LineItem = i.LineItem
    Join Products p on i.ProductID = p.ProductID

    update ol
    set ol.TaxAmt = ol.LineTotal * c.TaxRate
    from OrderLines ol
    Join inserted i on ol.OrderNumber = i.OrderNumber and ol.LineItem = i.LineItem
    Join Orders o on ol.OrderNumber = o.OrderNumber
    Join Customers cu on o.CustomerID = cu.CustomerID
    Join Cities ci on cu.CityID = ci.CityID
    Join States s on ci.StateID = s.StateID
    Join Countries c on s.CountryID = c.CountryID

    update ol
    set ol.FreightAmt =
        case
            when o.StoreID = 0 then 80.0 / LineItemCount.TotalLines
            else 0
        end
    from OrderLines ol
    Join inserted i on ol.OrderNumber = i.OrderNumber and ol.LineItem = i.LineItem
    Join Orders o on ol.OrderNumber = o.OrderNumber
    Join (
        select OrderNumber, count(*) as TotalLines
        from OrderLines
        group by OrderNumber
    ) as LineItemCount on ol.OrderNumber = LineItemCount.OrderNumber
end
```

● If StoreID changed (offline to online) → FreightAmt changed

```
create trigger trg_Orders_Update
on Orders
after update
as
begin
    set nocount on;

    if update(StoreID)
    begin
        update ol
        set ol.FreightAmt =
            case
                when o.StoreID = 0
                    then 80.0 / cnt.TotalLines
                else 0
            end
        from OrderLines ol
        join Orders o on ol.OrderNumber = o.OrderNumber
        join (
            select OrderNumber, count(*) as TotalLines
            from OrderLines
            group by OrderNumber
        ) cnt on ol.OrderNumber = cnt.OrderNumber
        join inserted i on o.OrderNumber = i.OrderNumber
    end
end
```

● Triggers

- if Unit_Price_USD or Unit_Cost_USD changed → LineTotal and TaxAmt changed for OrderLines

```
create trigger trg_Products_Update
on Products
after update
as
begin
    set nocount on;

    if update(Unit_Price_USD) or update(Unit_Cost_USD)
    begin
        update ol
        set
            ol.LineTotal = ol.Quantity * p.Unit_Price_USD,
            ol.TaxAmt = (ol.Quantity * p.Unit_Price_USD) * co.TaxRate
        from OrderLines ol
        join Products p on ol.ProductID = p.ProductID
        join Orders o on ol.OrderNumber = o.OrderNumber
        join Customers cu on o.CustomerID = cu.CustomerID
        join Cities ci on cu.CityID = ci.CityID
        join States s on ci.StateID = s.StateID
        join Countries co on s.CountryID = co.CountryID
        join inserted i on p.ProductID = i.ProductID;
    end
end
```

- if CityID changed → (TaxAmt) changed.

```
create trigger trg_Customers_Update
on Customers
after update
as
begin
    set nocount on;

    if update(CityID)
    begin
        update ol
        set
            ol.TaxAmt = ol.LineTotal * co.TaxRate
        from OrderLines ol
        join Orders o on ol.OrderNumber = o.OrderNumber
        join Customers cu on o.CustomerID = cu.CustomerID
        join Cities ci on cu.CityID = ci.CityID
        join States s on ci.StateID = s.StateID
        join Countries co on s.CountryID = co.CountryID
        join inserted i on cu.CustomerID = i.CustomerID
    end
end
```

● Stored Proc

● insert new customer

```
create procedure sp_AddCustomer
    @CustomerName varchar(100),
    @Gender varchar(10),
    @Birthday date,
    @CityID int
as
begin
    insert into Customers (CustomerID, Customer, Gender, Birthday, CityID)
    values (
        (select isnull(max(CustomerID),0)+1 from Customers),
        @CustomerName, @Gender, @Birthday, @CityID
    );
end
```

● insert new product

```
create procedure sp_AddProduct
    @ProductName nvarchar(max),
    @UnitCost decimal(10,2),
    @UnitPrice decimal(10,2),
    @BrandID int,
    @ColorID int,
    @SubcategoryID int
as
begin
    insert into Products (ProductID, Product, Unit_Cost_USD, Unit_Price_USD, BrandID, ColorID, SubcategoryID)
    values (
        (select isnull(max(ProductID),0)+1 from Products),
        @ProductName, @UnitCost, @UnitPrice, @BrandID, @ColorID, @SubcategoryID
    );
end
```

● update customer data

```
create procedure sp_UpdateCustomer
    @CustomerID int,
    @CustomerName varchar(100),
    @Gender varchar(10),
    @Birthday date,
    @cityID int
as
begin
    update Customers
    set Customer = @CustomerName,
        Gender = @Gender,
        Birthday = @Birthday,
        CityID = @CityID
    where CustomerID = @CustomerID
end

exec sp_UpdateCustomer
@CustomerID = 1,
@CustomerName = 'Ali Mohamed',
@Gender = 'Male',
@Birthday = '1999-12-31',
@cityID = 3;
```

● Stored Proc

● update product data

```
create procedure sp_UpdateProduct
    @ProductID int,
    @ProductName nvarchar(max),
    @UnitCost decimal(10,2),
    @UnitPrice decimal(10,2),
    @BrandID int,
    @ColorID int,
    @SubcategoryID int
as
begin
    update Products
    set Product = @ProductName,
        Unit_Cost_USD = @UnitCost,
        Unit_Price_USD = @UnitPrice,
        BrandID = @BrandID,
        ColorID = @ColorID,
        SubcategoryID = @SubcategoryID
    where ProductID = @ProductID;
end
```

● insert new Order

```
create procedure sp_AddOrder
    @OrderDate date,
    @DeliveryDate date,
    @CustomerID int,
    @StoreID int,
    @CurrencyCode varchar(10)
as
begin
    insert into Orders (OrderNumber, OrderDate, DeliveryDate, CustomerID, StoreID, CurrencyCode)
    values (
        (select isnull(max(OrderNumber),0)+1 from Orders),
        @OrderDate, @DeliveryDate, @CustomerID, @StoreID, @CurrencyCode
    );
end
```

● insert new Orderline

```
create procedure sp_AddOrderLine
    @OrderNumber int,
    @ProductID int,
    @Quantity int
as
begin
    declare @LineItem int;

    select @LineItem = isnull(max(LineItem),0)+1
    from OrderLines
    where OrderNumber = @OrderNumber;

    insert into OrderLines (OrderNumber, LineItem, ProductID, Quantity)
    values (@OrderNumber, @LineItem, @ProductID, @Quantity);
end
```

● Views

● Show All Data in DB View

```
create view vw_All
as
select
    o.OrderNumber, o.OrderDate, o.DeliveryDate,
    cu.Customer, cu.Gender,
    ci.City, s.State, co.Country, con.Continent, p.Product,
    b.Brand, c.Color, cat.Category, sc.Subcategory, ol.Quantity,
    ol.LineTotal, ol.TaxAmt, ol.FreightAmt, curr.CurrencyCode
from OrderLines ol
join Orders o on ol.OrderNumber = o.OrderNumber
join Customers cu on o.CustomerID = cu.CustomerID
join Cities ci on cu.CityID = ci.CityID
join States s on ci.StateID = s.StateID
join Countries co on s.CountryID = co.CountryID
join Continents con on co.ContinentID = con.ContinentID
join Products p on ol.ProductID = p.ProductID
join Brands b on p.BrandID = b.BrandID
join Colors c on p.ColorID = c.ColorID
join Subcategories sc on p.SubcategoryID = sc.SubcategoryID
join Categories cat on sc.CategoryID = cat.CategoryID
join Currencies curr on o.CurrencyCode = curr.CurrencyCode

select * from vw_All
```

● Sales For Product View

```
create or alter view vw_Product_sales
as
    select Category, Product, sum (LineTotal) as TotalSales
    from Products p
    JOIN OrderLines ol on ol.ProductID = p.ProductID
    JOIN Subcategories s on p.SubcategoryID = s.SubcategoryID
    JOIN categories c on s.CategoryID = c.CategoryID
    group by Category, Product

    select * from vw_Product_sales
```

● Views

● All Customer View

```
create view vw_Customers
as
select
    cu.CustomerID,
    cu.Customer,
    cu.Gender,
    cu.Birthday,
    ci.City,
    s.State,
    co.Country,
    co.TaxRate,
    con.Continent
from Customers cu
join Cities ci on cu.CityID = ci.CityID
join States s on ci.StateID = s.StateID
join Countries co on s.CountryID = co.CountryID
join Continents con on co.ContinentID = con.ContinentID
select * from vw_Customers
```

● All Product View

```
create view vw_Products
as
select
    p.ProductID,
    p.Product,
    p.Unit_Cost_USD,
    p.Unit_Price_USD,
    b.Brand,
    c.Color,
    sc.Subcategory,
    cat.Category
from Products p
join Brands b on p.BrandID = b.BrandID
join Colors c on p.ColorID = c.ColorID
join Subcategories sc on p.SubcategoryID = sc.SubcategoryID
join Categories cat on sc.CategoryID = cat.CategoryID
select * from vw_Products
```

● Views

● All Orders View

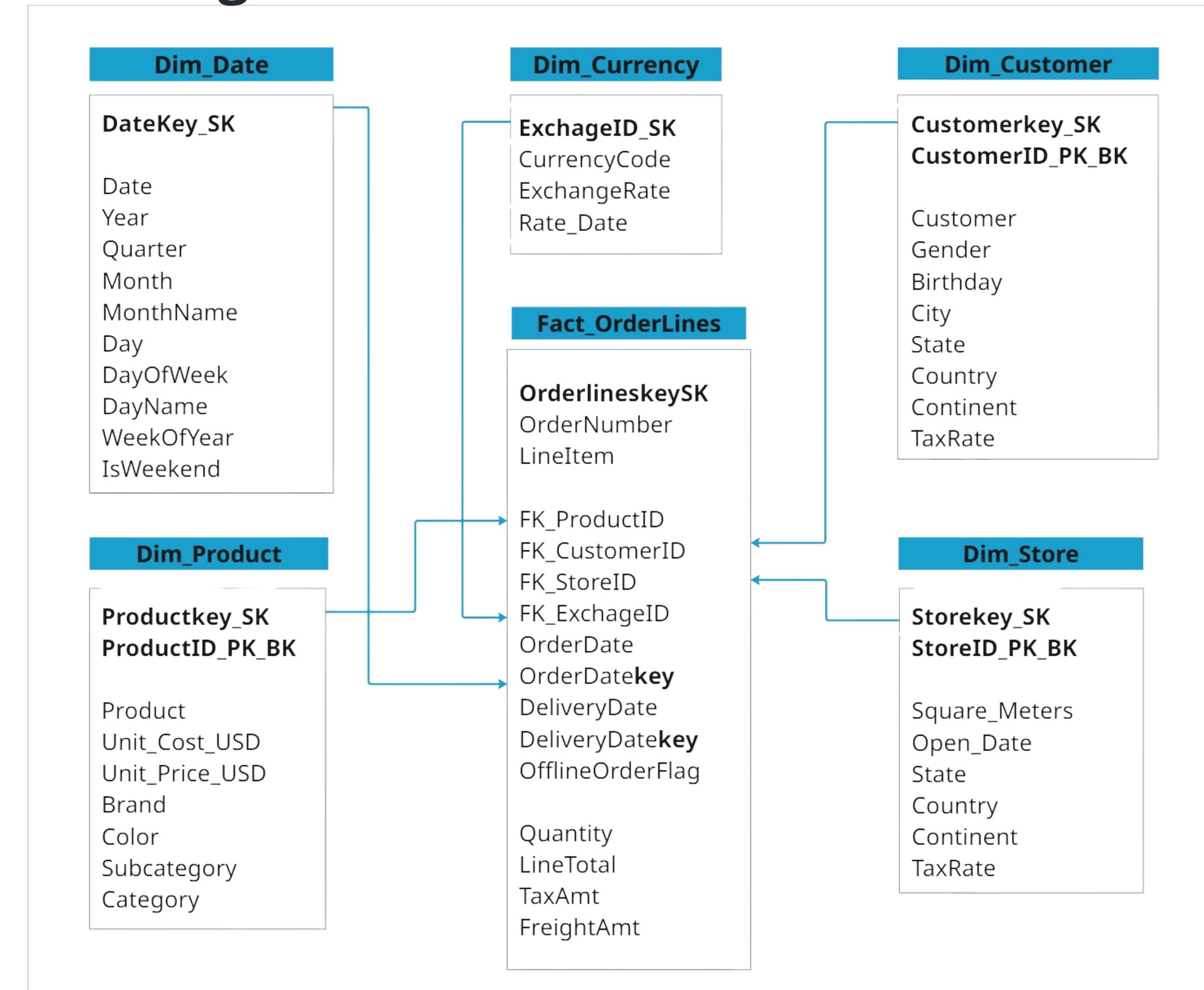
```
create view vw_Orders
as
select
    o.OrderNumber,
    o.OrderDate,
    o.DeliveryDate,
    cu.Customer,
    st.StoreID,
    st.Square_Meters,
    st.Open_Date,
    curr.CurrencyCode,
    o.offlineOrderFlag
from Orders o
join Customers cu on o.CustomerID = cu.CustomerID
left join Stores st on o.StoreID = st.StoreID
join Currencies curr on o.CurrencyCode = curr.CurrencyCode
select * from vw_Orders
```

● All OrderLines View

```
create view vw_OrderLines
as
select
    ol.OrderNumber,
    ol.LineItem,
    p.Product,
    ol.Quantity,
    ol.LineTotal,
    ol.TaxAmt,
    ol.FreightAmt
from OrderLines ol
join Products p on ol.ProductID = p.ProductID
select * from vw_OrderLines
```

DWH implementation

• Data Warehouse Figure



● Create DWH

```
Create Database Global_Electronics_DWH;
```

● Dim_Product

```
create table Dim_Product
(
    ProductKey int identity (1,1) primary key,
    ProductID int ,
    Product nvarchar(MAX),
    Unit_Cost_USD decimal (10,2),
    Unit_Price_USD decimal (10,2),
    Brand varchar (100),
    Color varchar (50),
    Subcategory varchar (100),
    Category varchar (100)
)
```

● Dim_Customer

```
create table Dim_Customer
(
    CustomerKey int identity(1,1) primary key,
    CustomerID int,
    Customer varchar (100),
    Gender varchar(10),
    Birthday date,
    City varchar(100),
    State varchar(100),
    Country varchar(50),
    TaxRate decimal(5,4),
    Continent varchar(50)
)
```

● Dim_Date

```
create table Dim_Date
(
    DateKey int primary key,
    Date date,
    Year int,
    Quarter int,
    Month int,
    MonthName varchar(20),
    Day int,
    DayOfWeek int,
    DayName varchar(20),
    WeekOfYear int,
    IsWeekend bit
)
```

```
declare @StartDate date = '2015-01-01';
declare @EndDate date = '2022-01-01';

while @StartDate <= @EndDate
begin
    insert into Dim_Date
    (
        DateKey,
        Date,
        Year,
        Quarter,
        Month,
        MonthName,
        Day,
        DayOfWeek,
        DayName,
        WeekOfYear,
        IsWeekend
    )
)
```

```
values (
    convert(int, format(@StartDate, 'yyyyMMdd')),
    @StartDate,
    Year(@StartDate),
    Datepart(Quarter, @StartDate),
    MONTH(@StartDate),
    Datename(Month, @StartDate),
    Day(@StartDate),
    Datepart(weekday, @StartDate),
    Datename(weekday, @StartDate),
    Datepart(Week, @StartDate),
    Case
        when Datepart(weekday, @StartDate) IN (1, 7) THEN 1
        else 0
    end
);

set @StartDate = Dateadd(Day, 1, @StartDate);
end;
```

● Dim_Store

```
create table Dim_Store
(
    StoreKey int identity(1,1) primary key,
    StoreID int ,
    Square_Meters decimal (10,2),
    Open_Date date,
    State varchar(100),
    Country varchar(50),
    TaxRate decimal(5,4),
    Continent varchar(50)
)
```

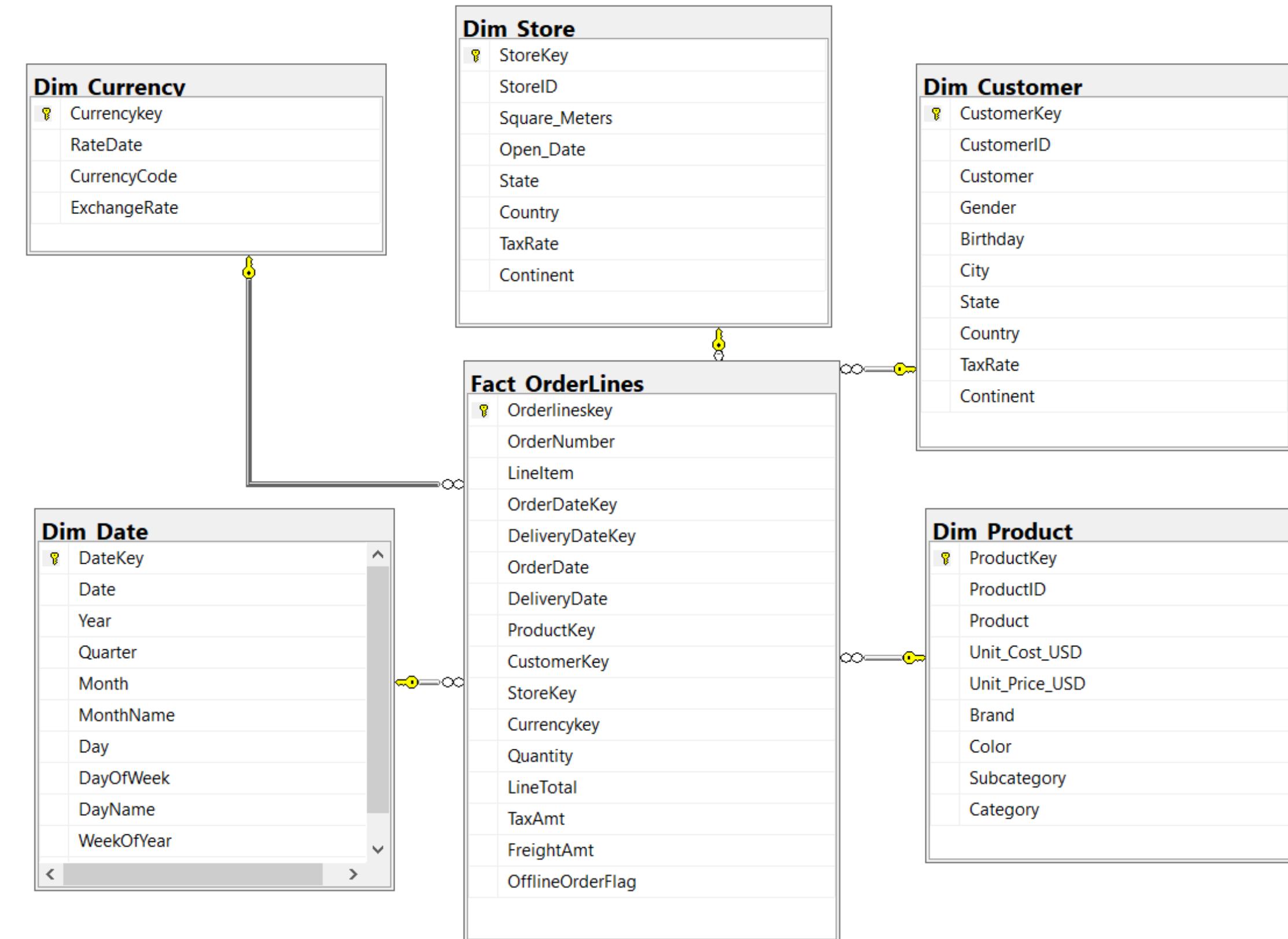
● Dim_Currencies

```
create table Dim_Currency
(
    Currencykey int identity (1,1) primary key,
    RateDate date,
    CurrencyCode varchar(10),
    ExchangeRate decimal (10,4),
)
```

● Fact_OrderLines

```
create table Fact_OrderLines
(
    Orderlineskey int identity (1,1) primary key,
    OrderNumber int,
    LineItem int,
    OrderDateKey int,
    DeliveryDateKey int ,
    OrderDate date,
    DeliveryDate date,
    ProductKey int,
    CustomerKey int,
    StoreKey int,
    Currencykey int,
    Quantity int,
    LineTotal decimal (18,2),
    TaxAmt decimal (10,2),
    FreightAmt decimal (10,2),
    OfflineOrderFlag bit,
    foreign key (ProductKey) references Dim_Product(ProductKey),
    foreign key (CustomerKey) references Dim_Customer(CustomerKey),
    foreign key (StoreKey) references Dim_Store(StoreKey),
    foreign key (CurrencyKey) references Dim_Currency(CurrencyKey),
    foreign key (OrderDateKey) references Dim_Date(DateKey),
    foreign key (DeliveryDateKey) references Dim_Date(DateKey)
```

● Data Warehouse Star Schema

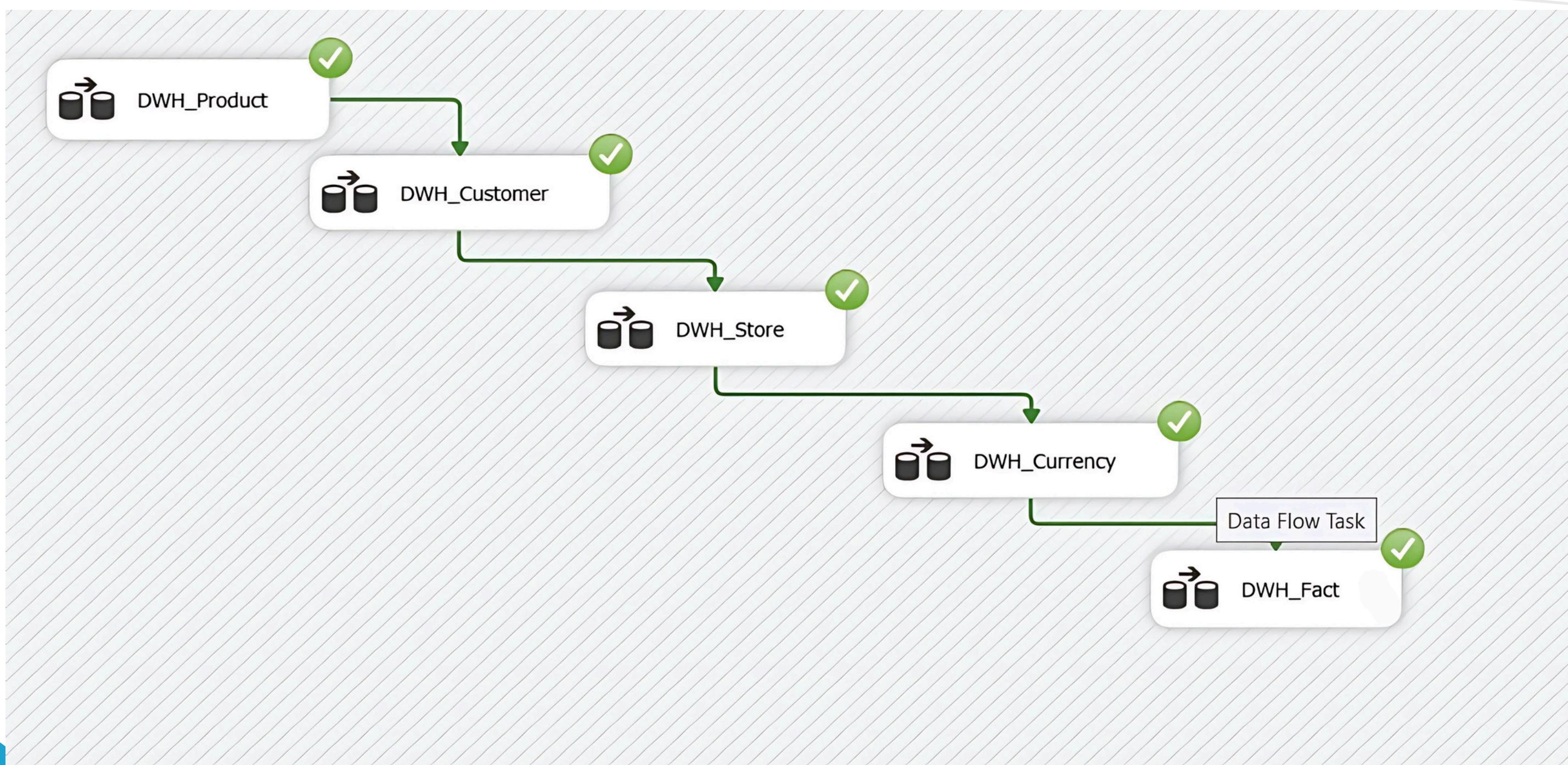




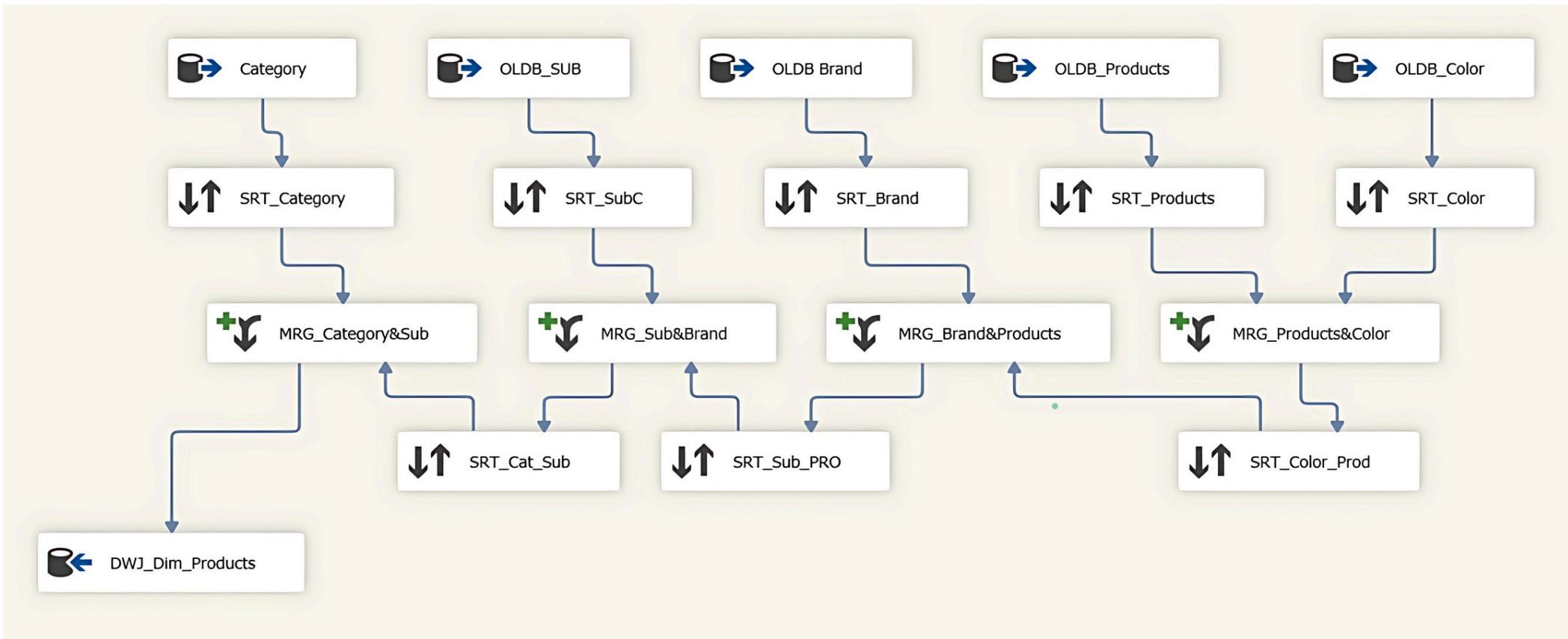
ETL DWH

Inserting Values Using **(SSIS)**

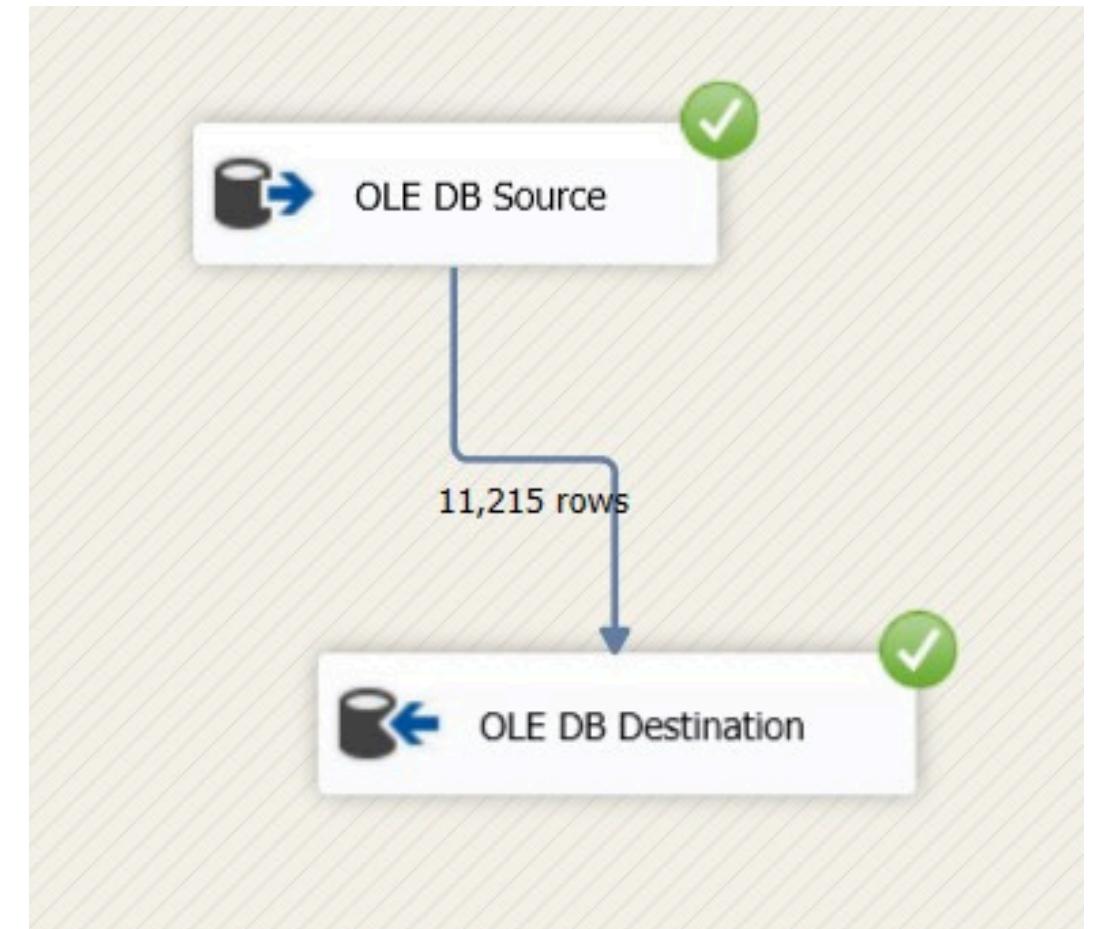
● Data Flow Task



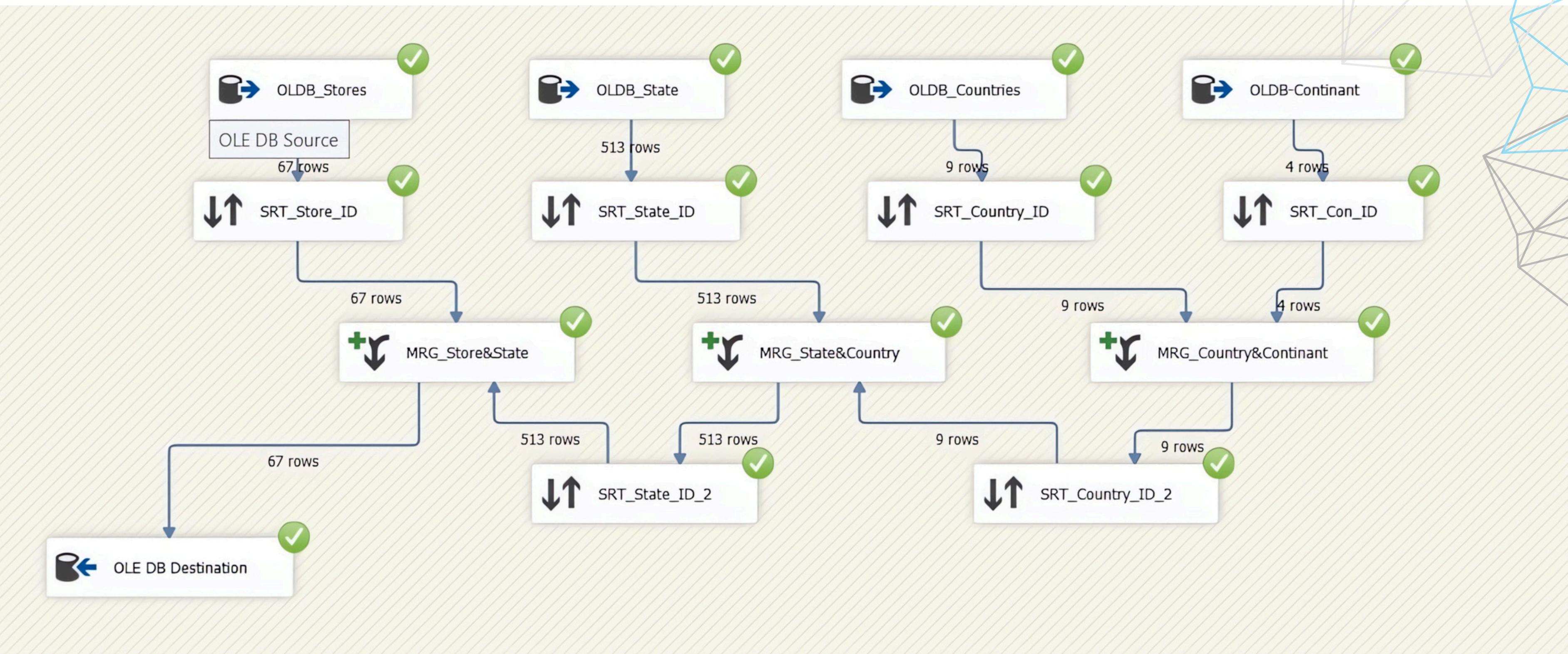
● Dim_Product



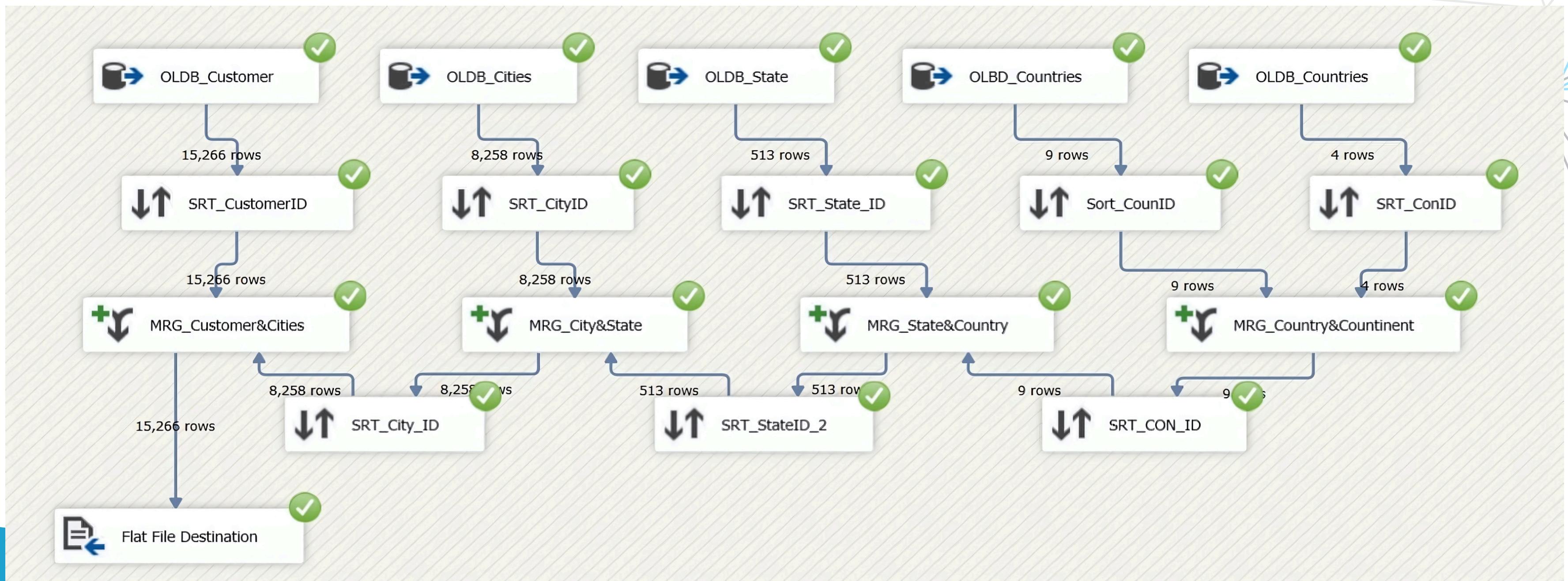
● Dim_Currencies



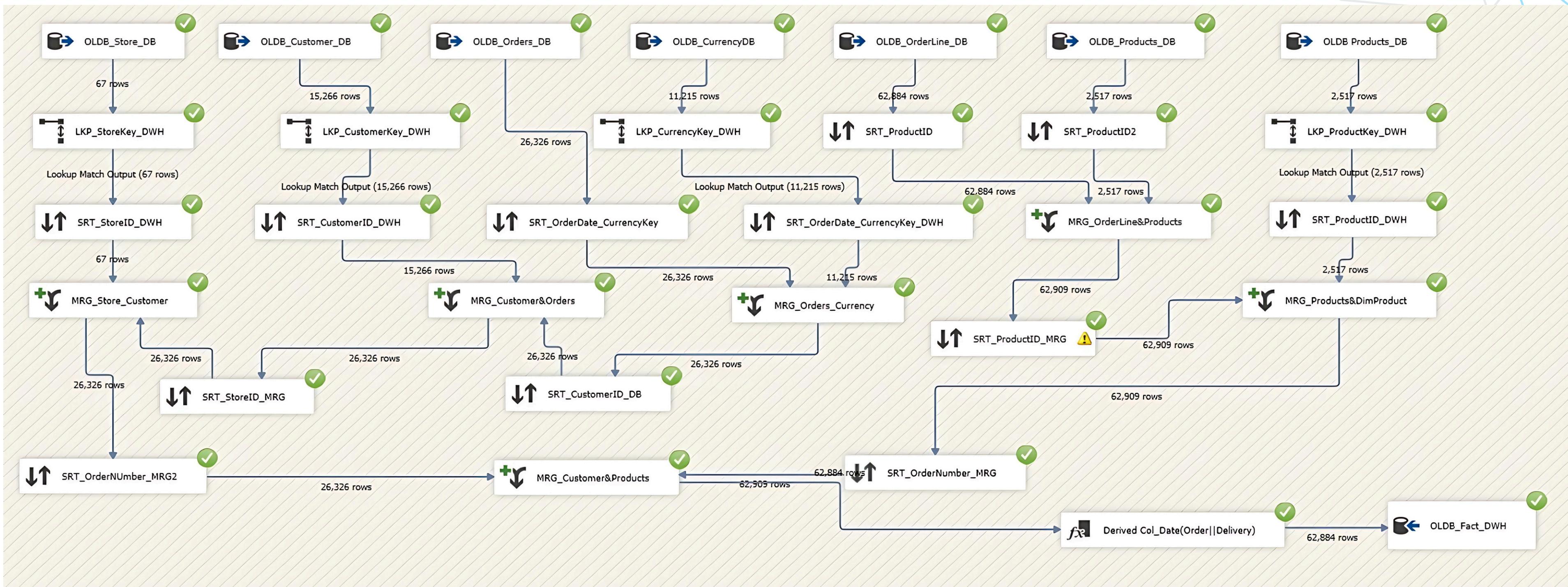
● Dim_Store



● Dim_Customer



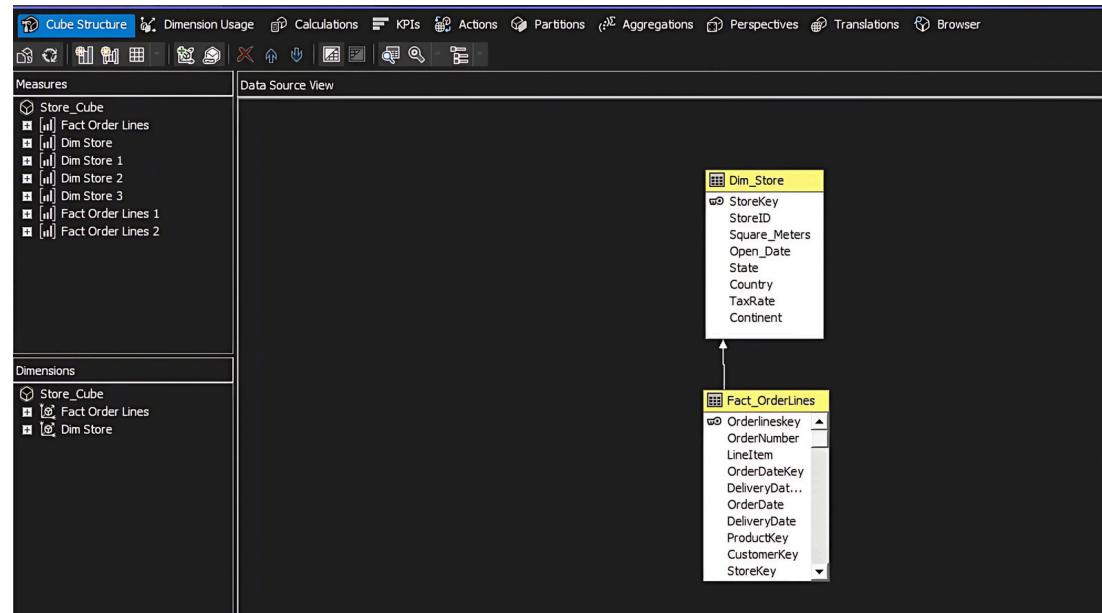
Fact Table



Bi Tools

Creating Cubes using **(SSAS)**

● Store Cube Structure



● Number of Orders by State in US

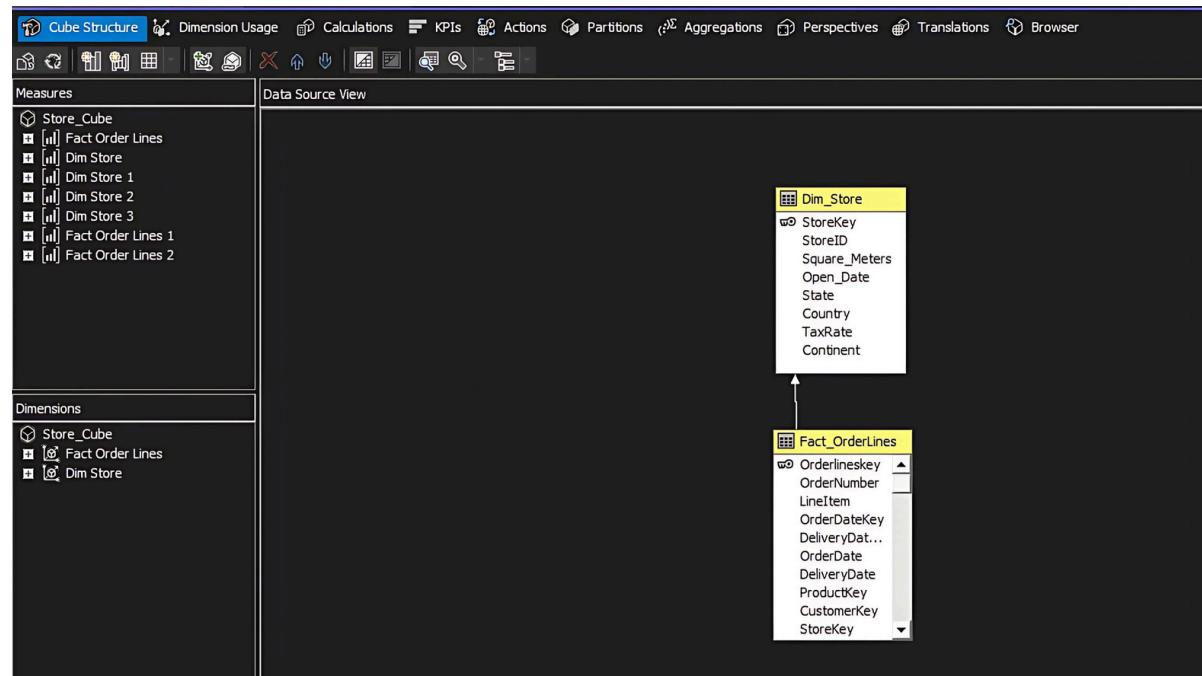
The screenshot shows the 'Browser' interface. At the top, the navigation bar includes 'Cube Structure', 'Dimension Usage', 'Calculations', 'KPIs', 'Actions', 'Partitions', 'Aggregations', 'Perspectives', 'Translations', and 'Browser'. The 'Language' dropdown is set to 'Default'. The MDX editor shows the query: 'SELECT * FROM [Store_Cube] WHERE Dim Store = Country AND Filter Expression = { United States }'. The results are displayed in a table:

State	Order Number Distinct Co...
Alaska	558
Arkansas	606
Connecticut	617
Hawaii	582
Idaho	539
Iowa	441
Kansas	605
Maine	581
Montana	534
Nebraska	629
Nevada	622
New Hampshire	525
New Mexico	605
Oregon	619
South Carolina	624
South Dakota	346
Utah	413

A secondary table on the right provides a detailed view of the data:

Row Labels	# Order
1	Nebraska
2	South Carolina
3	Nevada
4	Oregon
5	Connecticut
6	Arkansas
7	Kansas
8	New Mexico
9	West Virginia
10	Hawaii
11	Maine
12	Washington DC
13	Alaska
14	Wyoming
15	Idaho
16	Montana
17	New Hampshire
18	Iowa
19	Utah
20	South Dakota
21	Grand Total
22	11153

● Store Cube Structure



● Number of Orders by State in France

Language: Default

Edit as Text Import... MDX

Dimension Hierarchy Operator Filter Expression

Dim Store Country Equal { France }

Filter Expression

Row Labels # Order

A	B
1	Row Labels
2	West Dorset
3	Ashford
4	Cornwall
5	Highland
6	Moray
7	Newport
8	West Dorset
9	Grand Total

State Order Number Distinct Count

State	Order Number Distinct Count
Basse-Normandie	90
Corse	80
Île-de-France	57
Limousin	91
Martinique	79
Mayotte	81
Midi-Pyrénées	93

● Number of Orders by State in UK

Language: Default

Edit as Text Import... MDX

Dimension Hierarchy Operator Filter Expression

Dim Store Country Equal { United Kingdom }

Filter Expression

Row Labels # Order

A	B
1	Row Labels
2	West Dorset
3	Ashford
4	Cornwall
5	Highland
6	Moray
7	Colchester
8	Newport
9	West Dorset
10	Grand Total

State Order Number Distinct Co...

State	Order Number Distinct Co...
Ashford	445
Colchester	432
Cornwall	442
Highland	173
Moray	439
Newport	400
West Dorset	453

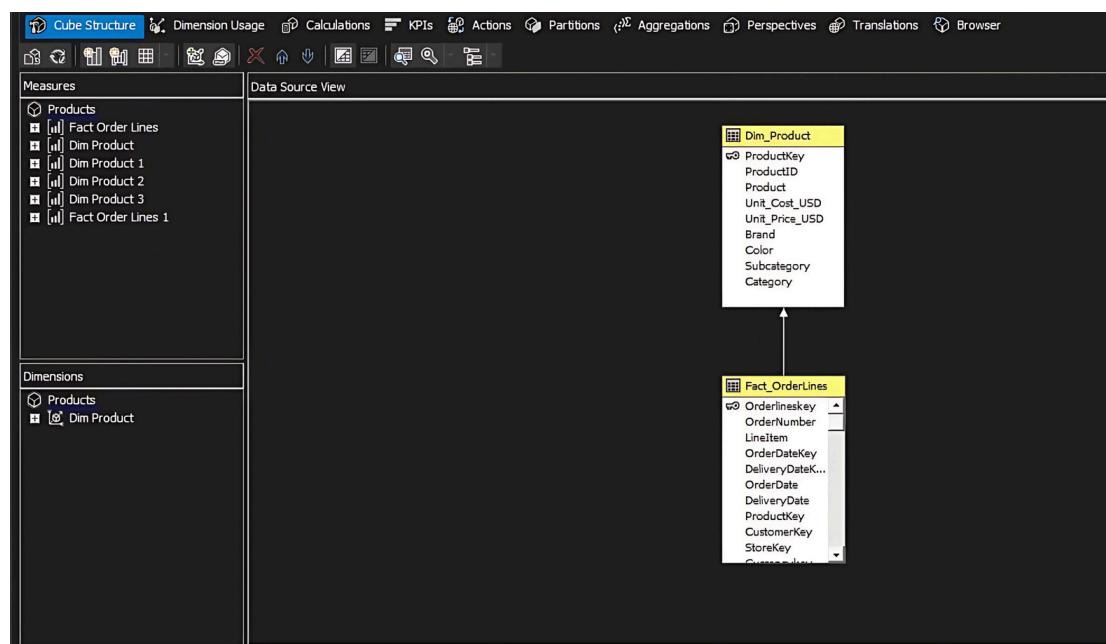
Row Labels # Order

A	B
1	Row Labels
2	Midi-Pyrénées
3	Limousin
4	Basse-Normandie
5	Mayotte
6	Corse
7	Martinique
8	Île-de-France
9	Grand Total

State Order Number Distinct Count

State	Order Number Distinct Count
Midi-Pyrénées	93
Limousin	91
Basse-Normandie	90
Mayotte	81
Corse	80
Martinique	79
Île-de-France	57
Grand Total	571

Category Cube Structure



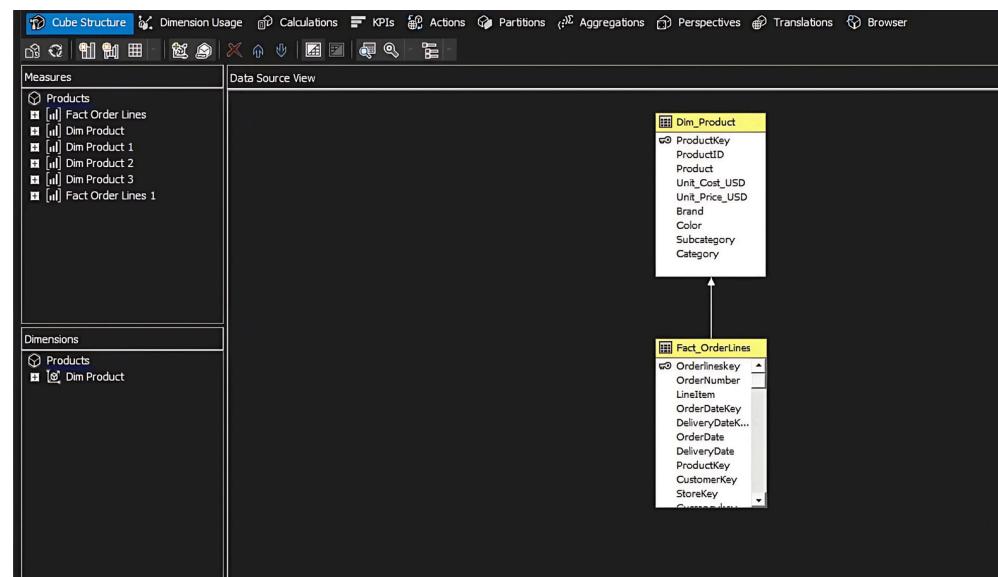
Sales Target Achievement by Category

The screenshot shows the Products.cube [Design] interface. On the left, there is a 'Metadata' tree view containing 'Measures', 'KPIs', 'Dim Product', 'Brand', 'Category', 'Color', 'Product', 'Product ID', 'Product Key', 'Subcategory', 'Unit Cost USD', and 'Unit Price USD'. In the main area, there is a table titled 'KPI linetotal' showing sales target achievement for different categories. The table includes columns for Category, KPI linetotal Value, KPI linetotal Goal, and KPI linetotal Status.

Category	KPI linetotal Value	KPI linetotal Goal	KPI linetotal Status
"Music, Movies and Audio Books"	3131006.44	5000000	-1
Audio	3169627.74	5000000	-1
Cameras and camcorders	6520168.02	5000000	1
Cell phones	6183791.22	5000000	1
Computers	19301595.46	5000000	1
Games and Toys	724829.43	5000000	-1
Home Appliances	10795478.59	5000000	1
TV and Video	5928982.69	5000000	1

	A	B	C	D
1	Row Labels	Line Total	Kpi Line Total Goal	Kpi Line Total Status
2	Computers	\$19,301,595	5000000	1
3	Home Appliances	\$10,795,479	5000000	1
4	Cameras and camcorders	\$6,520,168	5000000	1
5	Cell phones	\$6,183,791	5000000	1
6	TV and Video	\$5,928,983	5000000	1
7	Audio	\$3,169,628	5000000	-1
8	Music, Movies and Audio Books	\$3,131,006	5000000	-1
9	Games and Toys	\$724,829	5000000	-1
10	Grand Total	\$55,755,480	5000000	1

Brand Cube Structure



No Of Product in Each Brand

Brand	Product Key Distinct Count
A. Datum	132
Adventure Works	192
Contoso	710
Fabrikam	267
Litware	264
Northwind Traders	47
Proseware	244
Southridge Video	192
Tailspin Toys	144
The Phone Company	152
Wide World Importers	173

A B
Row Labels # Product
Contoso 710
Fabrikam 267
Litware 264
Proseware 244
Southridge Video 192
Adventure Works 192
Wide World Importers 173
The Phone Company 152
Tailspin Toys 144
A. Datum 132
Northwind Traders 47
Grand Total 2517

Bi Tools

Creating Reports using (SSRS)

● Reporting | SSRS

Design Preview

1 of 1 100% Find

Brand Profitability Report

Brand	Total Units Sold	Total Sales	Profit
Adventure Works	20.1K	11.85M	10.61M
Contoso	49.83K	10.79M	9.59M
Wide World Importers	27.41K	9.17M	8.19M
Fabrikam	11.38K	6.81M	6.11M
The Phone Company	18.76K	5.39M	4.81M
Proseware	9.43K	3.21M	2.87M
Litware	5.31K	2.66M	2.38M
Southridge Video	24.81K	2.58M	2.27M
A. Datum	5.66K	1.49M	1.32M
Northwind Traders	7.61K	1.13M	996.02K
Tailspin Toys	17.46K	682.73K	575.97K

Design Preview

1 of 1 100% Find | Next

Top 10 Contoso (Product) Costs

Product Key	Brand	Product	Unit Cost	Unit Price
1868	Contoso	Contoso Washer & Dryer 25.5in M255 White	914.67	1989.00
1873	Contoso	Contoso Washer & Dryer 25.5in M255 Silver	914.67	1989.00
1878	Contoso	Contoso Washer & Dryer 25.5in M255 Blue	914.67	1989.00
1883	Contoso	Contoso Washer & Dryer 25.5in M255 Green	914.67	1989.00
1888	Contoso	Contoso Washer & Dryer 25.5in M255 Red	914.67	1989.00
1893	Contoso	Contoso Washer & Dryer 25.5in M255 Pink	914.67	1989.00
1867	Contoso	Contoso Washer & Dryer 27in L270 White	878.66	2652.00
1872	Contoso	Contoso Washer & Dryer 27in L270 Silver	878.66	2652.00
1877	Contoso	Contoso Washer & Dryer 27in L270 Blue	878.66	2652.00
1882	Contoso	Contoso Washer & Dryer 27in L270 Green	878.66	2652.00

● Reporting | SSRS

Design Preview

1 of 1 100% Fin

Categories by Profit



Category	Total Profit
Computers	17.26M
Home Appliances	9.67M
Cameras and camcorders	5.83M
Cell phones	5.49M
TV and Video	5.3M
Audio	2.79M
"Music, Movies and Audio Books"	2.73M
Games and Toys	595.86K

Design Preview

1 of 1 100%

Average Tax Rate by Country



Country	Avg Tax Rate
Netherlands	20%
Australia	15%
Italy	14%
Germany	12%
United Kingdom	10%
Canada	10%
France	9%
United States	8%



Power BI



Over View | Dashboard

Welcome Back

Navigation

OverView

Store

Brand

Product

Customer

Filter

0



Year

All



Brand

All



Category, & Sub

All



Gender

All



No of Stores

58

Product

2517

Customers

15,266

Total QTY

198K

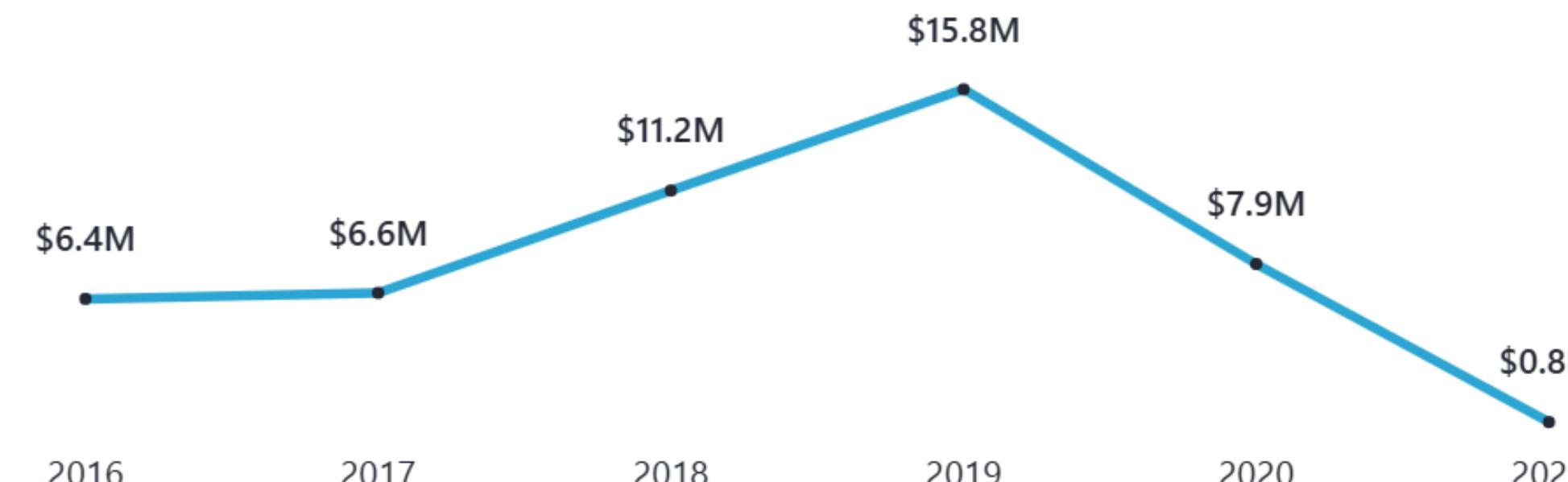
Total Revenue

\$61.79M

Total Profit

\$32.66M

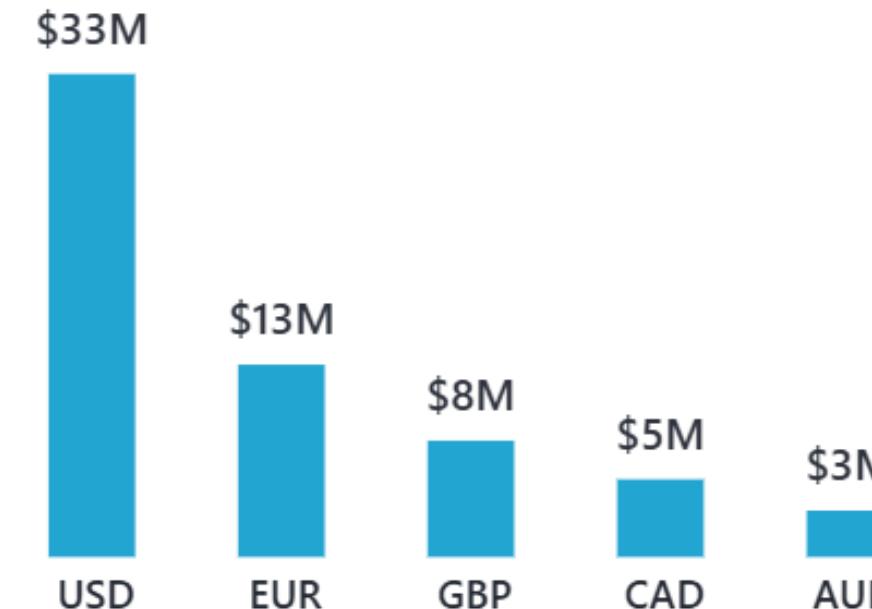
Revenue by Year



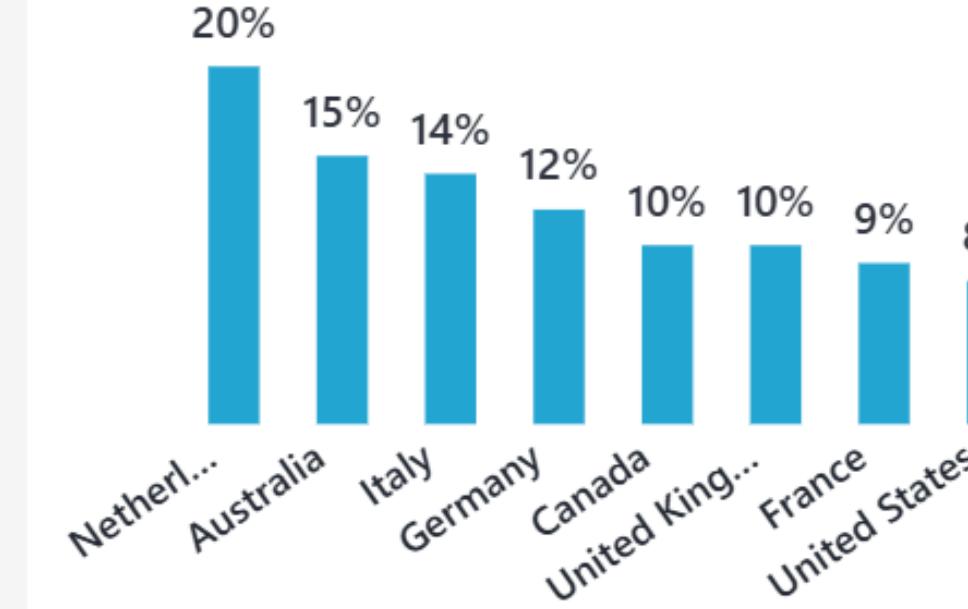
Revenue by Store



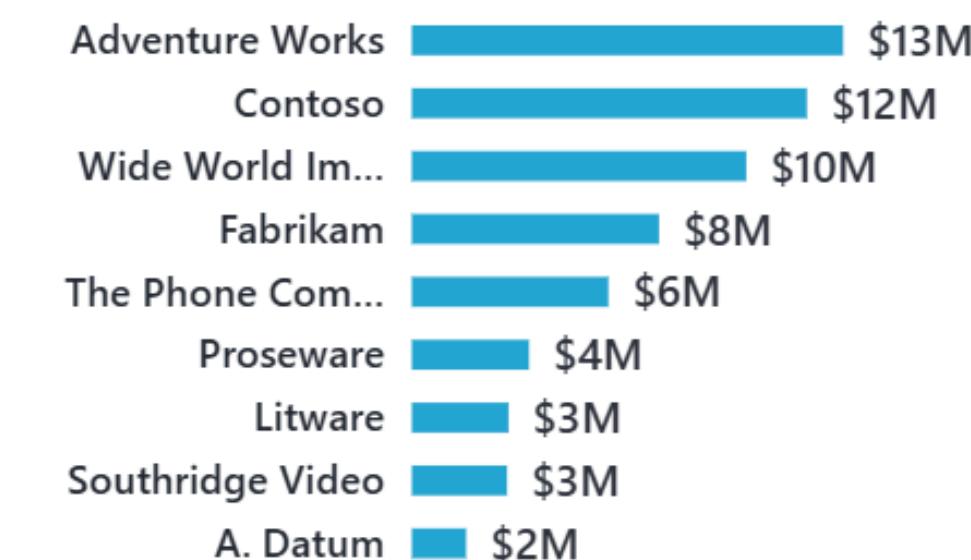
Revenue By currency



Tax Rate by Country



Revenue by Brand





No of Stores

58

Rev. Per Store

841.31K

Quantity

198K

Total Revenue

\$61.79M

Total Profit

\$32.66M

Navigation

Overview

Store

Brand

Product

Customer

Filter

0



Year

All



Brand

All



Category, & Sub

All

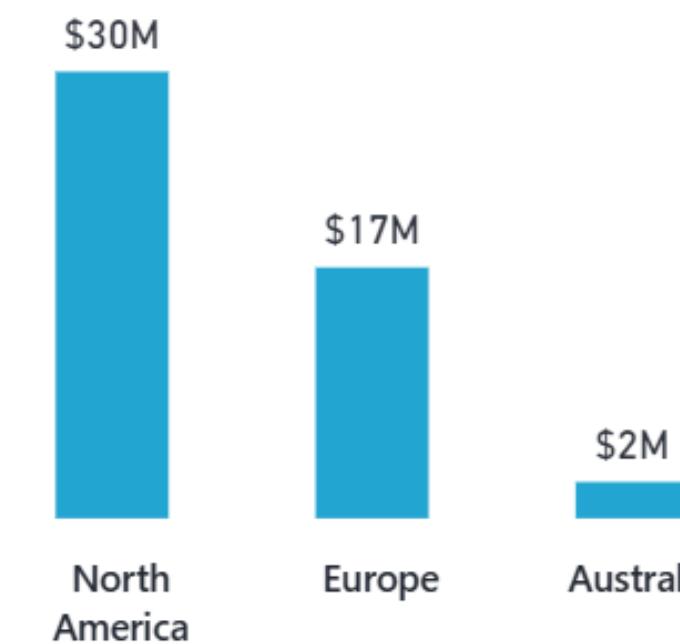


Gender

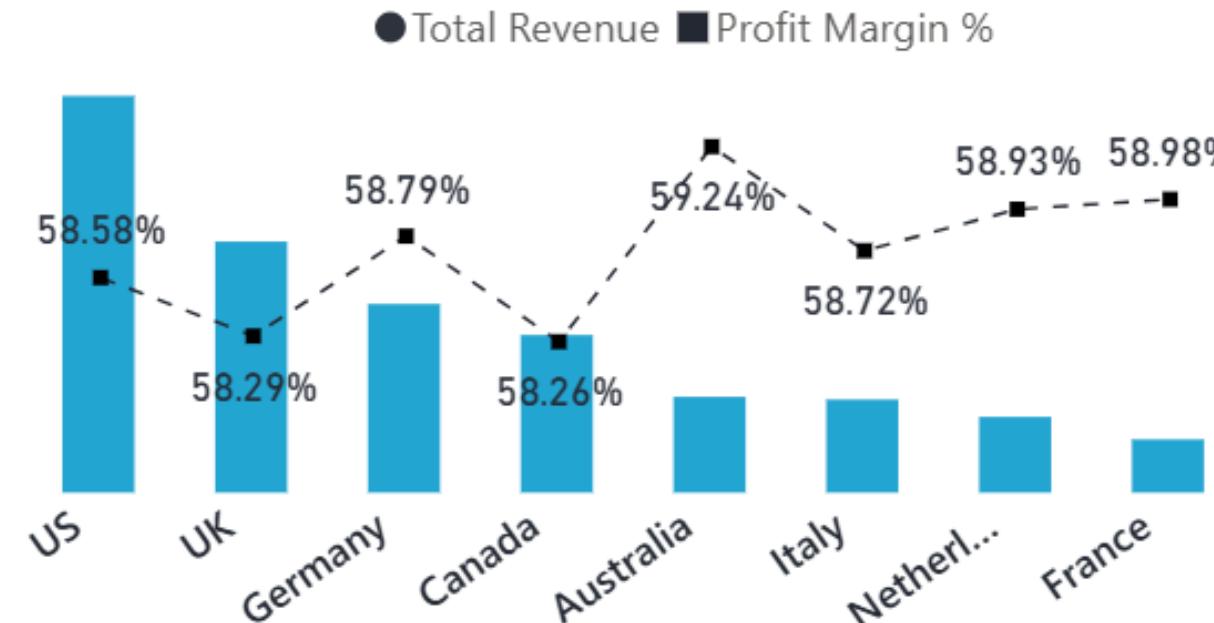
All



Total Revenue by Continent



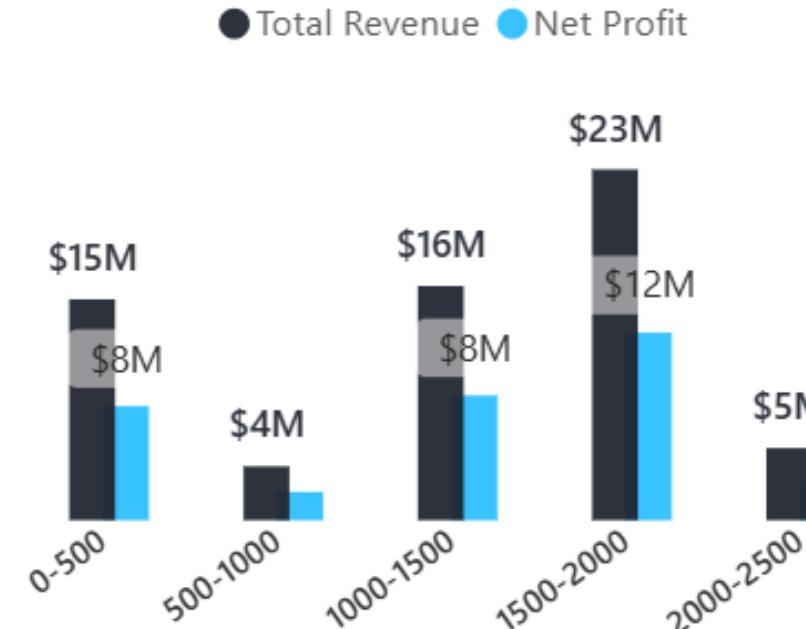
Revenue and % Profit M by Country



Top 10 Rev. By Store

56	\$1.5M
51	\$1.5M
55	\$1.5M
10	\$1.5M
58	\$1.4M
46	\$1.4M
62	\$1.4M
60	\$1.4M
65	\$1.4M

Total Revenue By Square M



Revenue Over Time





Brand | Dashboard

Welcome Back



Navigation

Overview

Store

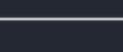
Brand

Product

Customer

Filter

0



Year

All

Brand

All



Category, & Sub

All



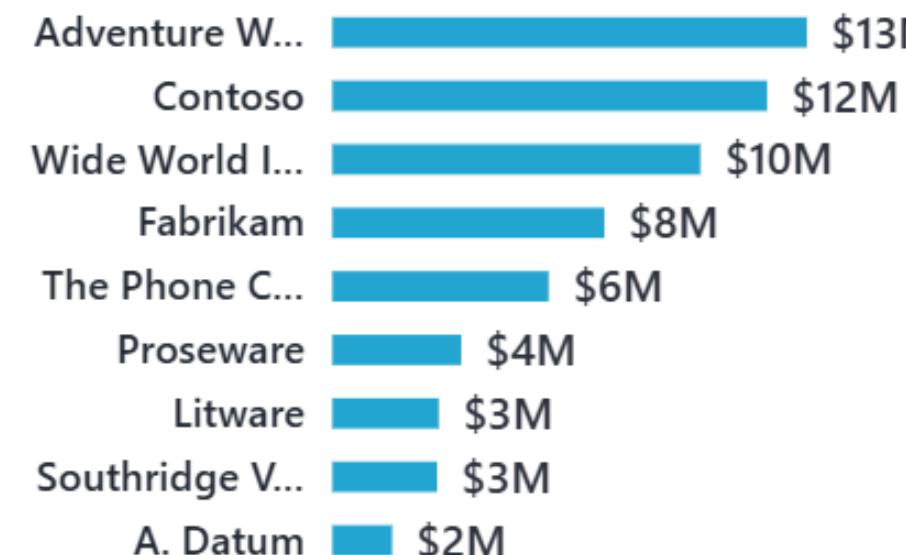
Gender

All

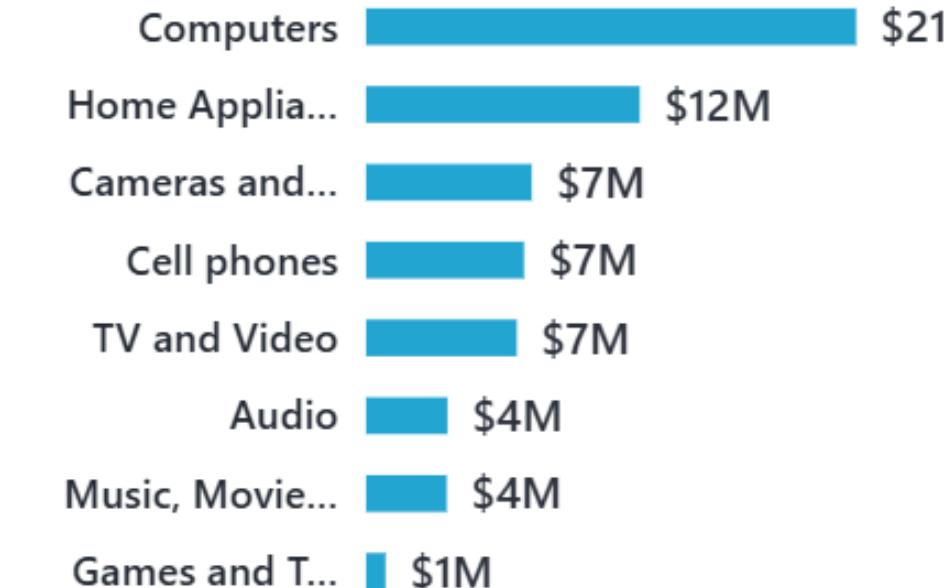


# Product	# Sold Products	#UnSold Products	# Brand	# Category	# SubCategory	Avg Unit Price
2517	2492	25	11	8	32	281.94

Revenue by Brand



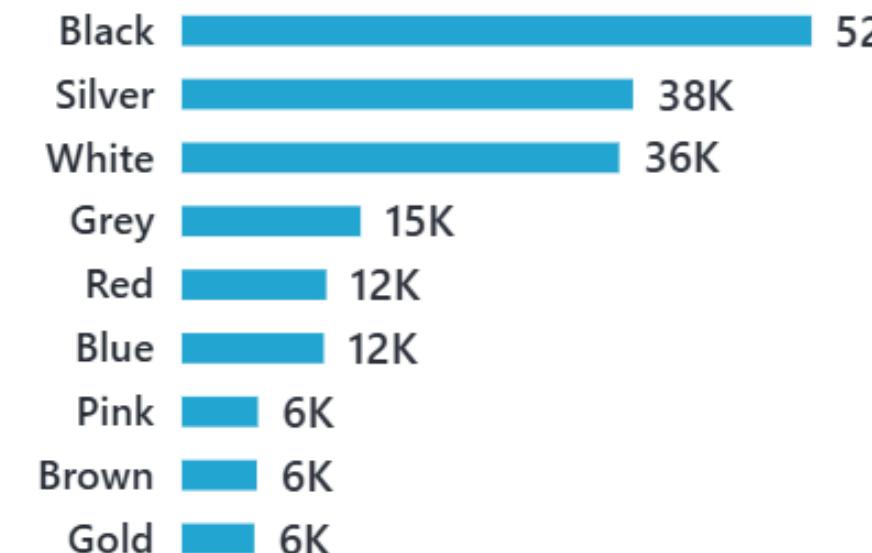
Revenue by Category



Revenue by Subcategory



Qty by Color



Top 10 Products by Revenue

Product	#Orders	Revenue	%Revenue	%Net Profit
WWI Desktop PC2.33 X2330 Black	154	\$556,964	11.76%	11.76%
Adventure Works Desktop PC2.33 XD233 Brown	144	\$512,770	10.83%	10.80%
Adventure Works Desktop PC2.33 XD233 Silver	146	\$512,274	10.82%	10.85%
Adventure Works Desktop PC2.33 XD233 Black	151	\$493,943	10.43%	10.42%
Adventure Works Desktop PC2.33 XD233 White	141	\$479,962	10.14%	10.17%
WWI Desktop PC2.33 X2330 White	131	\$468,429	9.89%	9.88%
WWI Desktop PC2.33 X2330 Brown	151	\$466,487	9.85%	9.84%
Adventure Works 52 LCD HDTV X590 White	40	\$434,952	9.19%	9.18%
WWI Desktop PC2.33 X2330 Gray	144	\$411,852	8.70%	8.71%
Total	1217	\$4,734,815	100.00%	100.00%



Navigation

Overview

Store

Brand

Product

Customer

Filter

0



Year

All



Brand

All



Category, & Sub

All



Gender

All



No Of Products

2517

Sold Product

2492

UnSold Products

25

Avg Unit Price

281.94

Total Revenue

\$61.79M

Total Profit

\$32.66M

Top 10 Products by Revenue

WWI Desktop PC2.33 ...	\$556.96K
Adventure Works Des...	\$512.77K
Adventure Works Des...	\$512.27K
Adventure Works Des...	\$493.94K
Adventure Works Des...	\$479.96K
WWI Desktop PC2.33 ...	\$468.43K
WWI Desktop PC2.33 ...	\$466.49K
Adventure Works 52 L...	\$434.95K
Adventure Works 52 L...	\$411.95K

Bottom 10 Products by Revenue

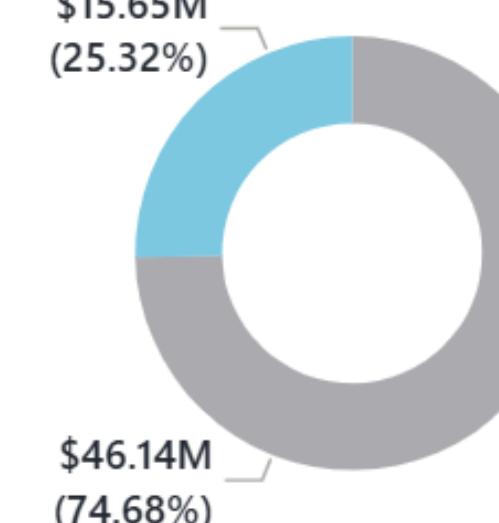
Proseware Desk Lamp E0...	\$64.77
SV USB Data Cable E600 ...	\$64.52
Contoso Smart Battery ...	\$64.51
SV USB Sync Charge Cab...	\$57.20
SV USB Data Cable E600 ...	\$56.39
SV USB Sync Charge Cab...	\$41.39
SV USB Sync Charge Cab...	\$39.41
Litware 120mm Blue LED ...	\$32.75
Litware 16 White Oscillati...	\$31.41

#Sold Products by Country

United States	United Kingdom	Canada	Australia	Italy	Germany	Canada	Australia	More
2404	1850	1571	1150	1147	1614	1043	861	
online	Germany	Netherlands	France					
2186								

Total Revenue by Is Weekend

Is Weee... ● WorkDay ● WeekEnd



Total Revenue by Season

Winter	\$25M
Autumn	\$15M
Summer	\$14M
Spring	\$9M



Customer | Dashboard

Welcome Back

Report >

No Of Customer

15,266

Active Customer

11,887

In Active Customer

3,379

Avg Rev. Per Customer

\$5,198

Total Revenue

\$61.79M

Net Profit

\$32.66M

Navigation

Overview

Store

Brand

Product

Customer

Filter

0

Year

All

Brand

All

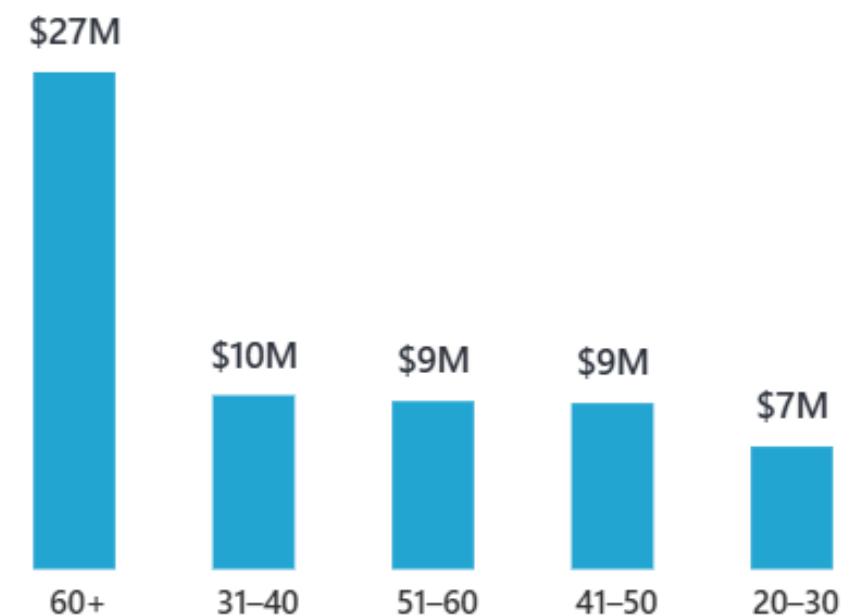
Category, & Sub

All

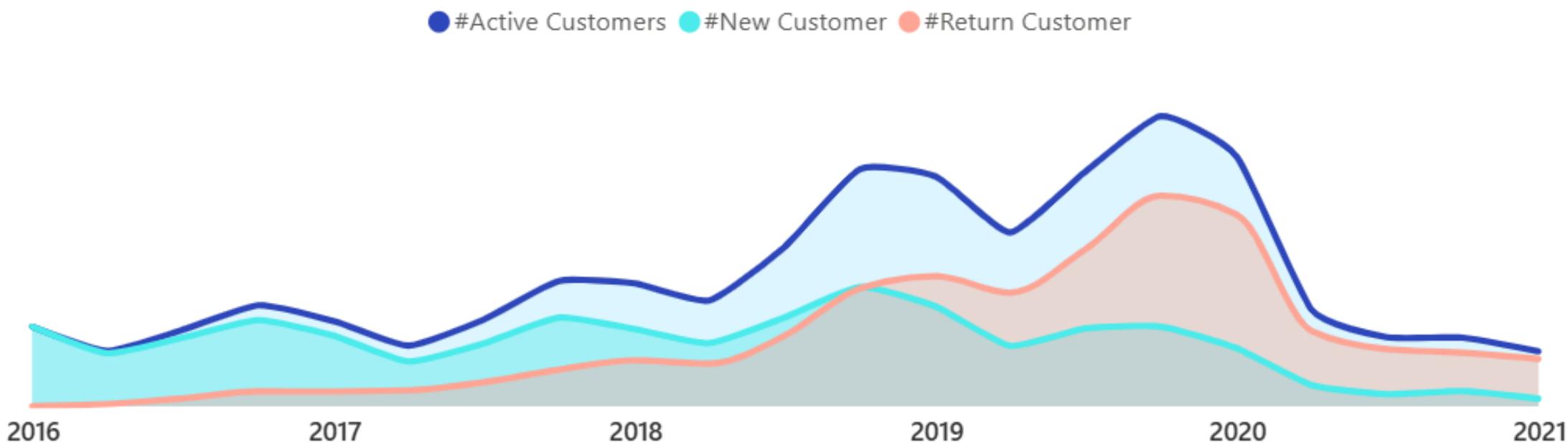
Gender

All

Revenue by Age Group



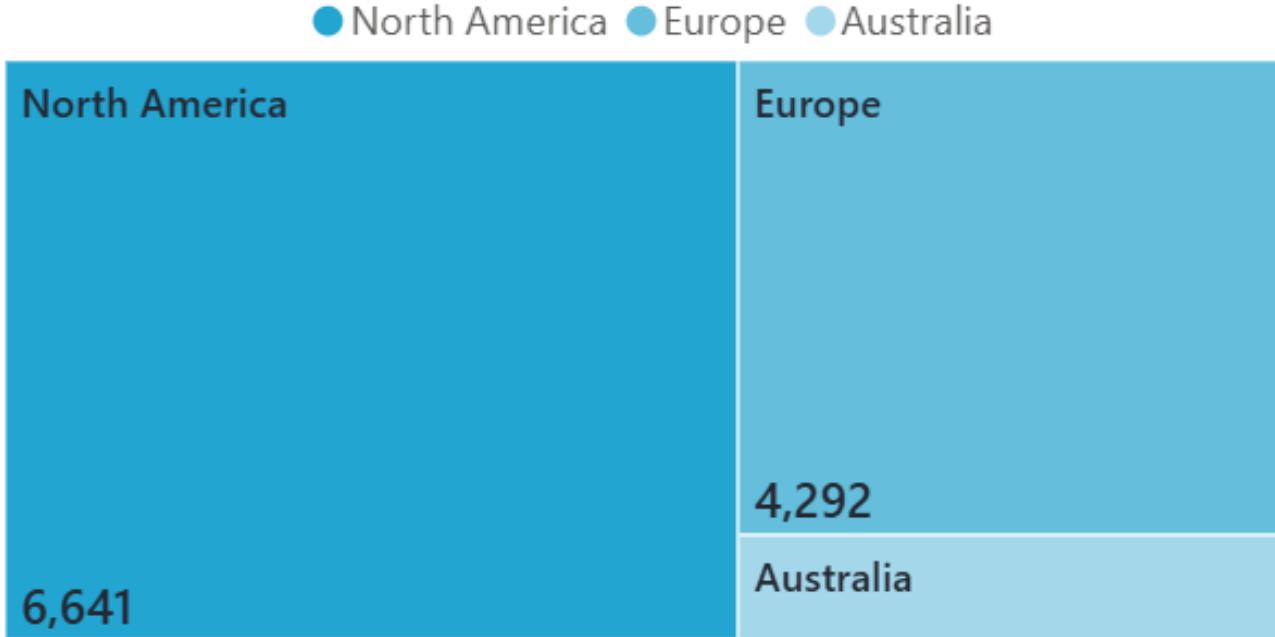
No Of Customers by Years



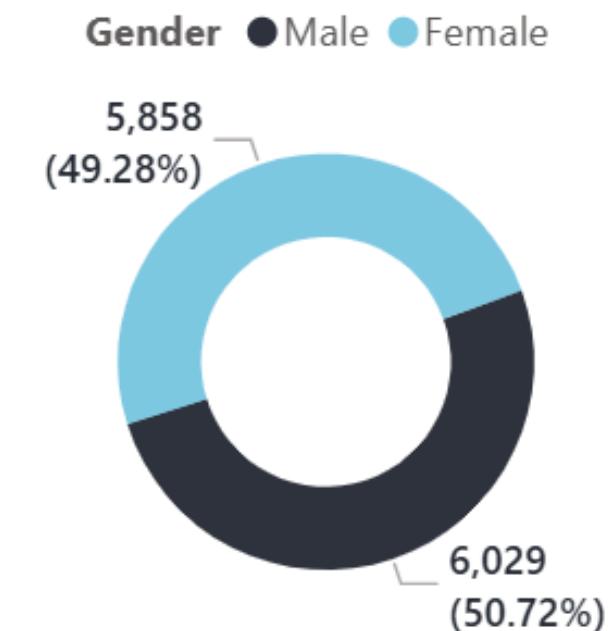
Top 20 Customers by Revenue

12263	\$67K
13627	\$47K
3975	\$47K
14292	\$46K
5260	\$46K
4102	\$46K
6354	\$43K
1932	\$43K
13960	\$41K

Active Customers by Continent



Active Customers by Gender

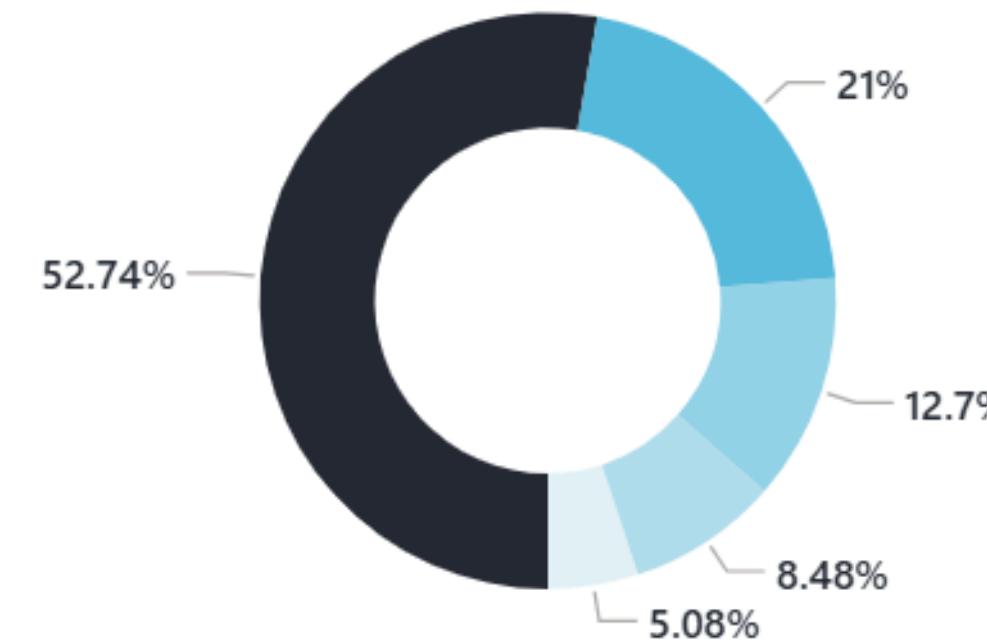


Currencies | Report

Country	AUD	CAD	EUR	GBP	USD	Total
United States					\$30.26M	\$30.26M
United Kingdom				\$7.66M	\$0.65M	\$8.31M
Canada		\$5.19M	\$0.05M	\$0.06M	\$0.84M	\$6.14M
Germany			\$6.12M			\$6.12M
Australia	\$3.14M	\$0.05M		\$0.12M	\$0.76M	\$4.07M
Italy			\$2.84M			\$2.84M
Netherlands			\$2.36M		\$0.05M	\$2.40M
France			\$1.62M		\$0.03M	\$1.64M
Total	\$3.14M	\$5.24M	\$12.98M	\$7.85M	\$32.58M	\$61.79M

% Total Revenue by CurrencyCode

● USD ● EUR ● GBP ● CAD ● AUD



Stores | Report

[Back To Dashboard](#)

StoreKey	Country_E	State	#Orders	Total Revenue	Net Profit	% Total Revenue	% Total Profit
1	online	online	5580	\$12,992,155.81	\$6,672,692.64	21.0269%	20.4%
56	US	Nevada	622	\$1,534,702.72	\$830,551.75	2.4838%	2.5%
51	US	Kansas	605	\$1,510,347.10	\$819,659.12	2.4444%	2.5%
55	US	Nebraska	629	\$1,498,600.94	\$810,300.06	2.4254%	2.5%
10	Canada	Northwest Territories	658	\$1,470,665.11	\$774,757.55	2.3802%	2.4%
58	US	New Mexico	605	\$1,434,738.20	\$784,095.76	2.3220%	2.4%
46	US	Connecticut	617	\$1,427,865.49	\$761,271.82	2.3109%	2.3%
62	US	South Carolina	624	\$1,412,782.27	\$764,997.20	2.2865%	2.3%
60	US	Oregon	619	\$1,408,136.82	\$754,702.32	2.2790%	2.3%
65	US	Washington DC	566	\$1,365,805.97	\$745,283.99	2.2105%	2.3%
Total			26326	\$61,788,177.91	\$32,662,688.38	100.0000%	100.0%

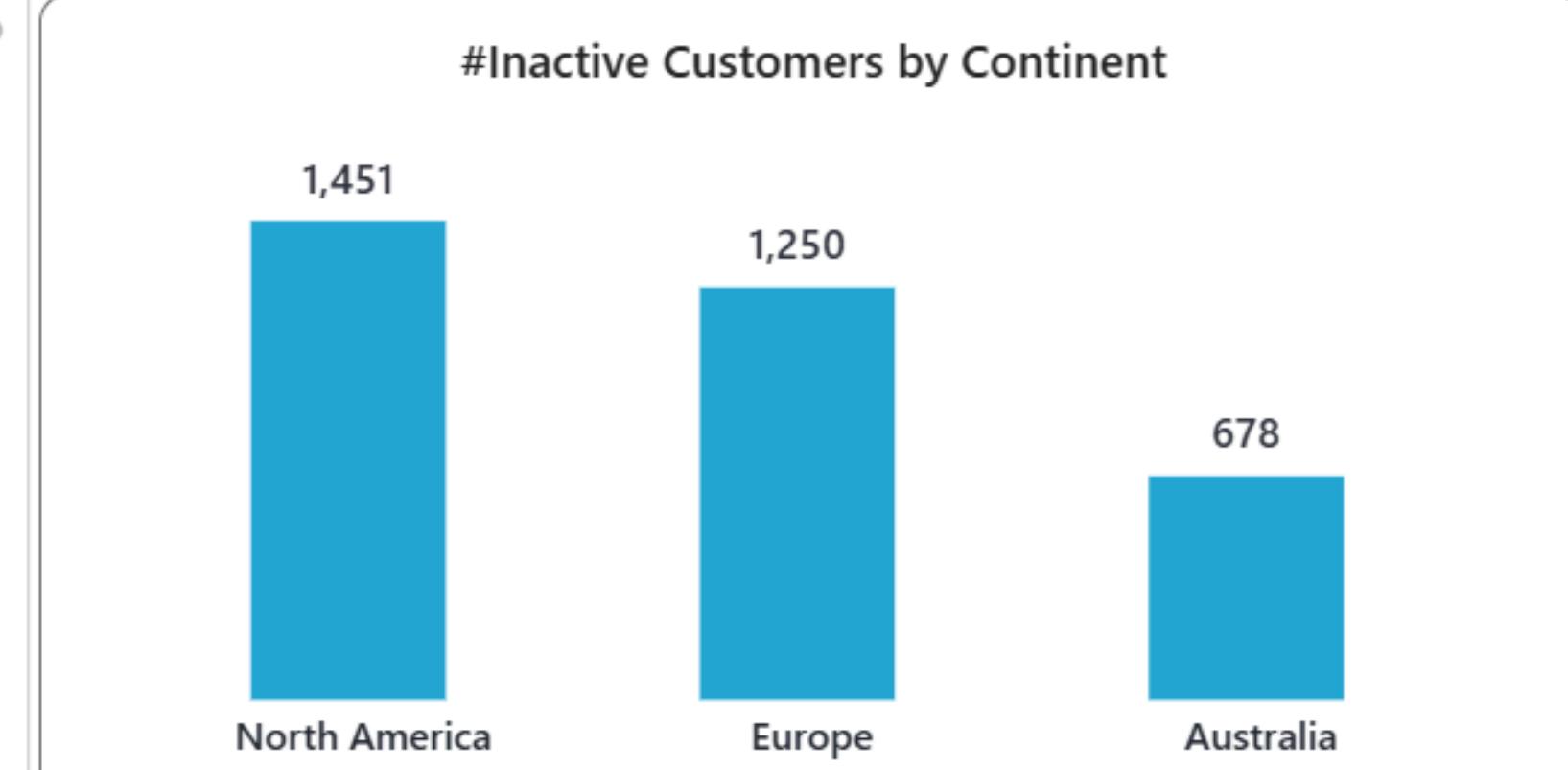
Active Customers

CustomerKey	Customer	#Orders	Total Qty	Total Revenue	% Total Revenue	Net Profit	% Total Profit	Last Order	Age Group	Country	City
12263	Matthew Flemming	9	75	\$66,981.37	0.1084%	\$39,606.02	0.1%	27/12/2019	60+	United States	Anaheim
13627	Karen Jones	3	30	\$46,999.20	0.0761%	\$28,819.96	0.1%	20/02/2019	51–60	United States	Lacassine
3975	Stefanie Hartmann	3	35	\$46,504.07	0.0753%	\$26,957.37	0.1%	24/11/2018	41–50	Germany	Geltendorf
14292	Zrina Topic	7	60	\$46,291.02	0.0749%	\$26,008.23	0.1%	02/01/2020	60+	United States	Lyerly
5260	Gaspare Trevisan	14	124	\$46,096.42	0.0746%	\$23,440.78	0.1%	20/02/2021	31–40	Italy	Galdo Degli Albu
4102	Stephan Rothstein	4	36	\$45,583.29	0.0738%	\$26,716.09	0.1%	25/12/2020	60+	Germany	Lütjenwestedt
6354	Esin Holman	4	42	\$43,012.70	0.0696%	\$23,282.10	0.1%	05/11/2019	41–50	Netherlands	s-Gravenpolder
1932	Roy Le	3	32	\$42,695.25	0.0691%	\$23,986.19	0.1%	20/02/2020	41–50	Canada	Merrickville
13960	Dennis Weissmuller	4	40	\$41,326.33	0.0669%	\$24,054.60	0.1%	21/11/2019	60+	United States	Philadelphia
7677	Michael Robertson	8	80	\$40,490.67	0.0655%	\$20,151.82	0.1%	11/06/2020	60+	United Kingdom	DOWNHEAD
Total		26326	197757	\$61,788,177.91	100.0000%	\$32,662,688.38	100.0%	20/02/2021			

InActive Customers

CustomerKey	Customer	Country	State	City
4	Jai Poltpalingada	Australia	South Australia	MIDDLE RIVER
6	Hayden Clegg	Australia	South Australia	TEMPLERS
7	Nicholas Caffyn	Australia	Queensland	JUBILEE POCKET
8	Lincoln Jenks	Australia	Queensland	KULLOGUM
14	Dean Innes	Australia	Queensland	ELLESMORE
15	Laura Le Rennetel	Australia	Victoria	BEAUCHAMP
17	Angus Beaurepaire	Australia	Western Australia	GREENFIELDS
23	Claudia Davison	Australia	Queensland	KUBIN VILLAGE
24	Nate Lowes	Australia	Queensland	CALLIDE
26	Nicholas Shand	Australia	Queensland	GORDONBROOK
30	Allan Gandy	Australia	New South Wales	HARTLEY

#Inactive Customers by Continent



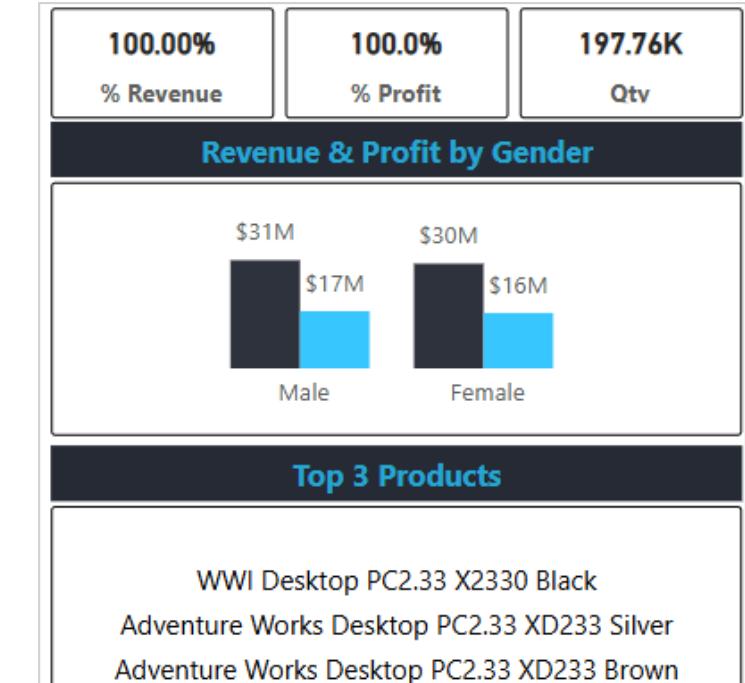
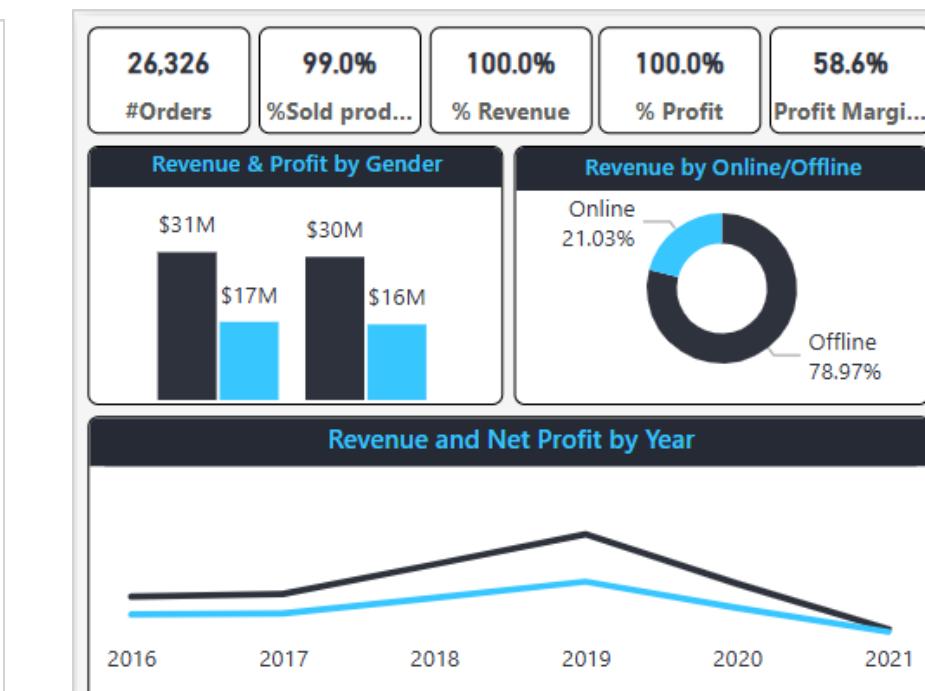
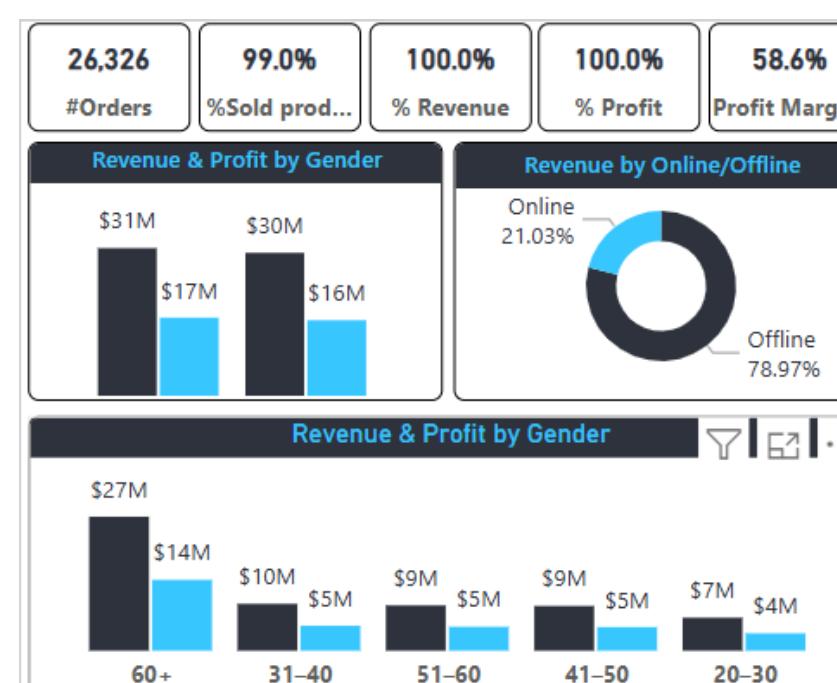
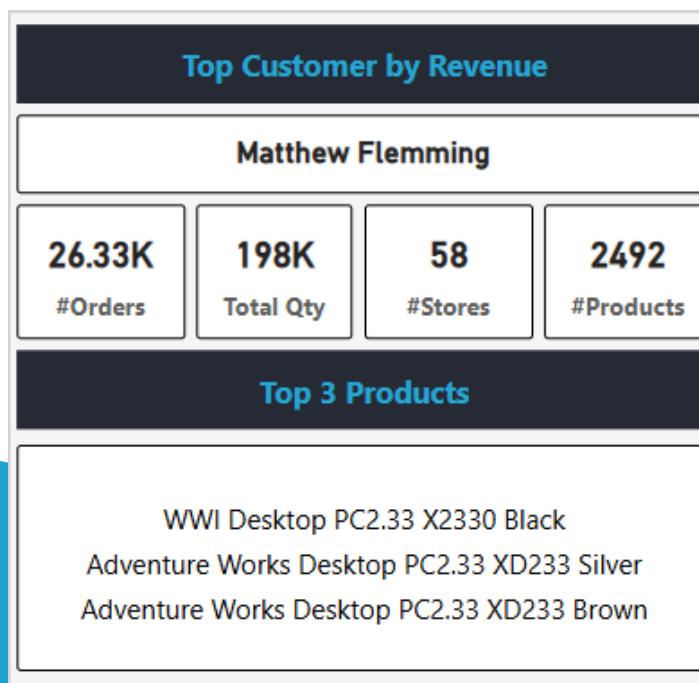
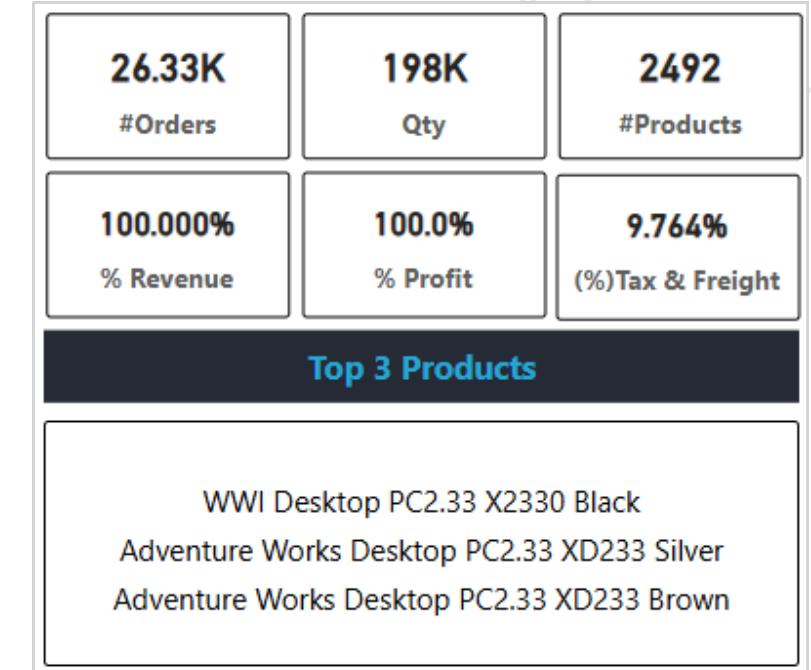
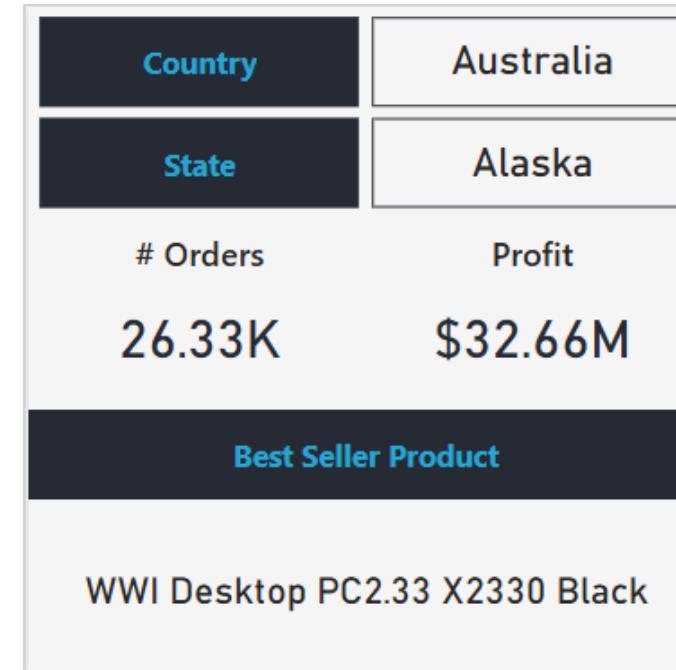
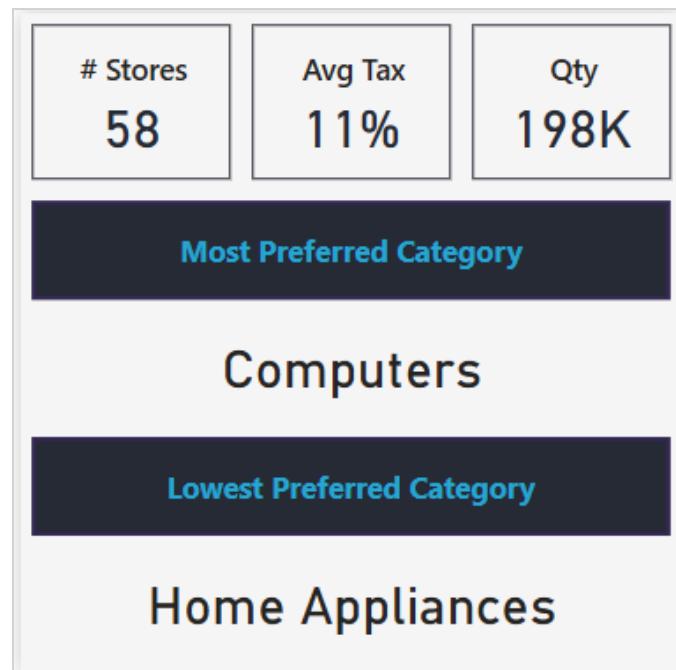
Unsold Products | Report

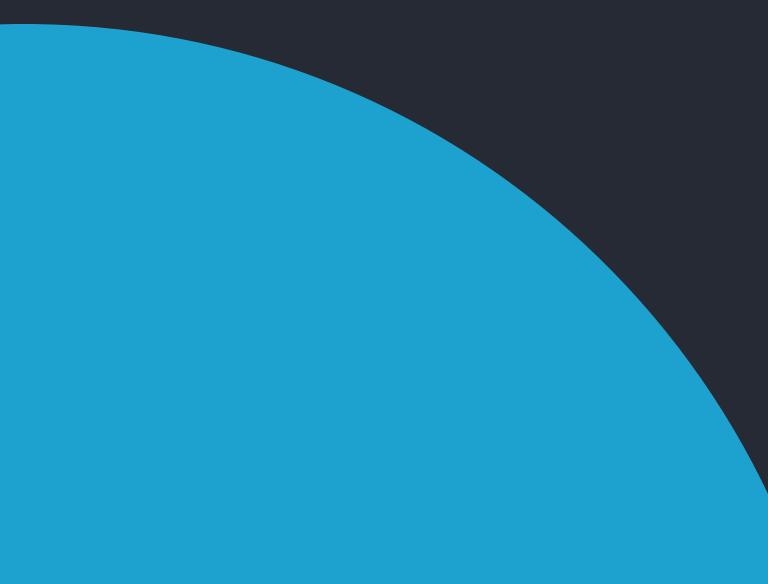
25

[!\[\]\(0e5aeb08abccf3e048d904d9c746b4a5_img.jpg\) Back To Dashboard](#)

ProductKey	Subcategory	Product	Category	Total Cost E
2193	Lamps	Adventure Works Chandelier M6150 Black	Home Appliances	105.76
2229	Lamps	Adventure Works Desk Lamp E1200 Blue	Home Appliances	15.29
2220	Lamps	Adventure Works Desk Lamp E1300 Grey	Home Appliances	40.76
2212	Lamps	Adventure Works Desk Lamp E1300 Silver	Home Appliances	40.76
2191	Lamps	Adventure Works Floor Lamp M2150 Black	Home Appliances	155.89
2190	Lamps	Adventure Works Floor Lamp X1150 Black	Home Appliances	210.72
2214	Lamps	Adventure Works Floor Lamp X1150 Grey	Home Appliances	210.72
2219	Lamps	Adventure Works Wall Lamp E3150 Grey	Home Appliances	52.00
2211	Lamps	Adventure Works Wall Lamp E3150 Silver	Home Appliances	52.00
274	Home Theater System	Contoso Home Theater System 5.1 Channel M1530 White	TV and Video	183.49
1885	Washers & Dryers	Contoso Washer & Dryer 21in E210 Green	Home Appliances	815.22
				102.17
Total				3,143.54

● ToolTips





Tableau

Store Dashboard | 2020

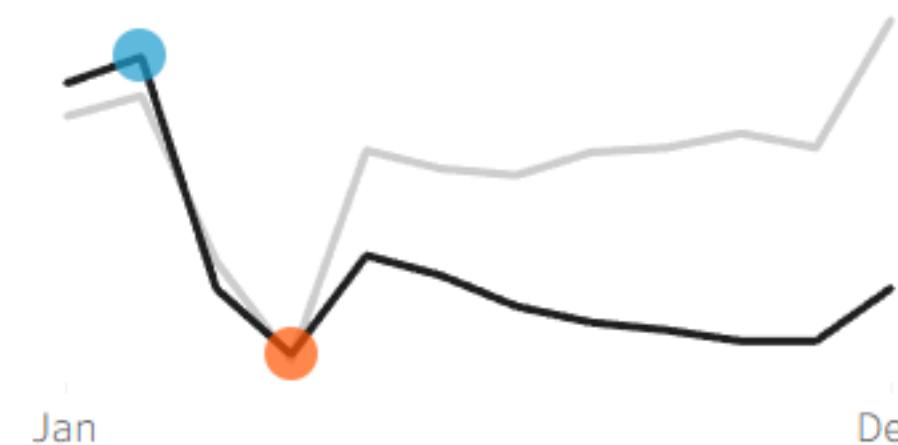


2020 vs. 2019 ● Highest Month ● Lowest Month

Total Quantity

34,463

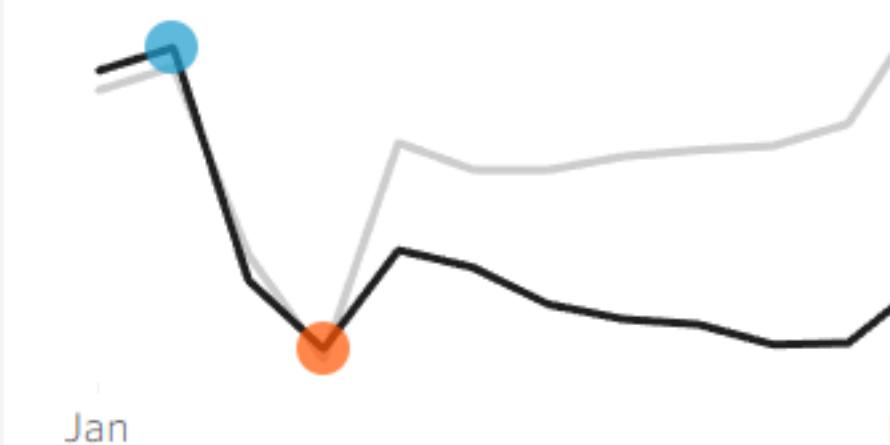
▼ -49.6% vs. PY



Total Revenue

\$9.29M

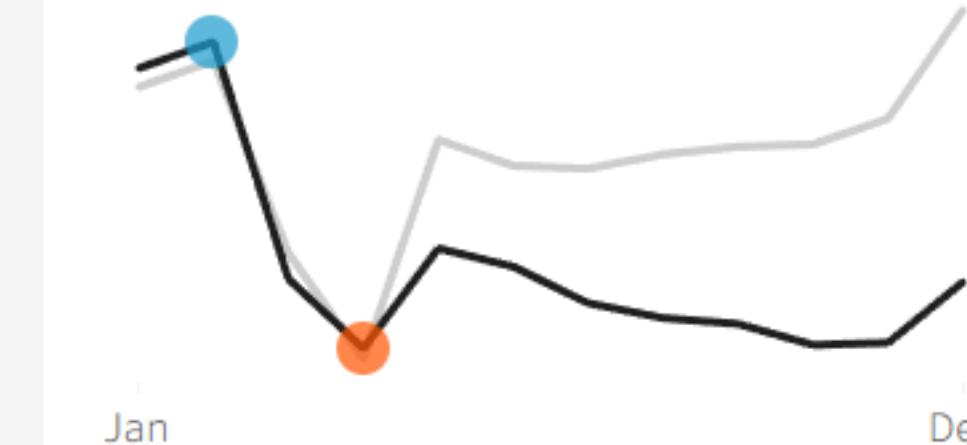
▼ -49.1% vs. PY



Total Profit

\$5.45M

▼ -49.1% vs. PY



Sales By Country & Store

2020 Sales vs. 2019 Sales

United States

51



46



44



65



54



56



55



52



58



66



62



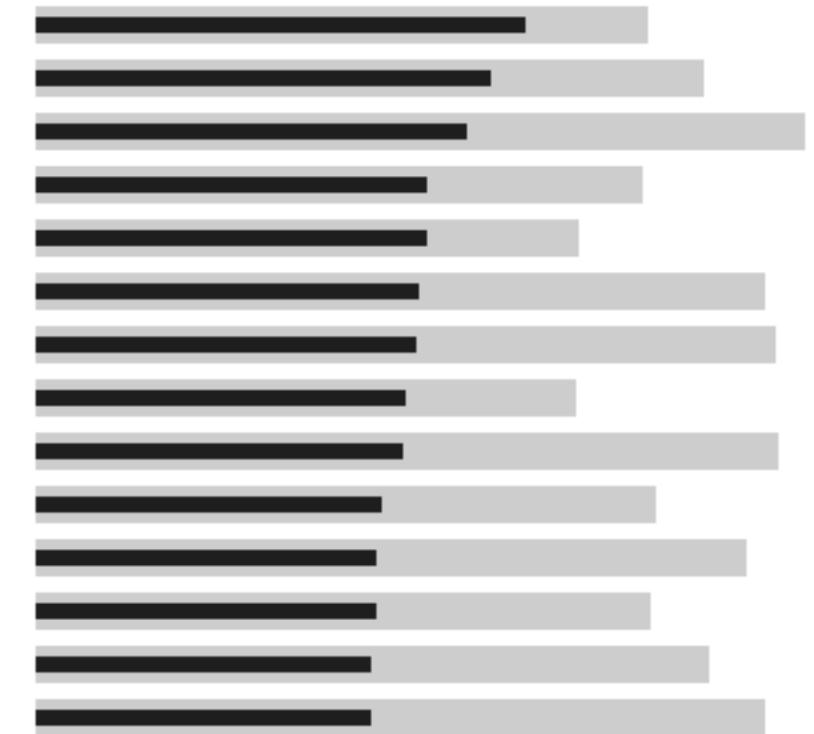
45



48



67



Top 10 Store By Profit | 2020

Rank	Country	Store ID	2020 Profit	2020 Sales	Order..
#1	online	1	\$1,214,465	\$2,069,951	1,071
#2	United States	51	\$179,235	\$299,135	121
#3	United States	46	\$164,503	\$276,715	115
#4	United States	44	\$156,567	\$263,444	110
#5	United States	65	\$143,911	\$239,206	115
#6	United States	54	\$138,141	\$238,202	104
#7	United States	55	\$137,773	\$231,295	96
#8	United States	58	\$134,926	\$224,025	102
#9	United States	56	\$134,431	\$233,390	112
#10	United States	52	\$131,918	\$225,794	121

Brand Dashboard | 2020

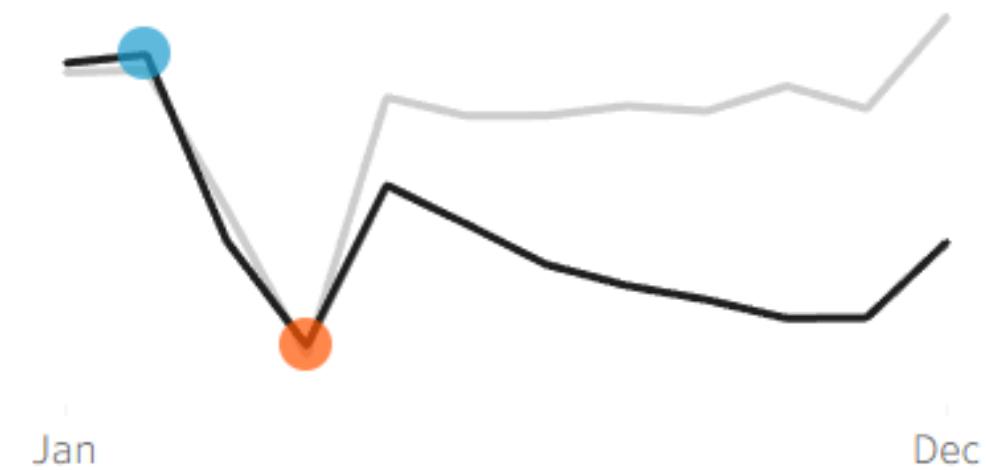


2020 vs. 2019 ● Highest Month ● Lowest Month

of Product

2,001

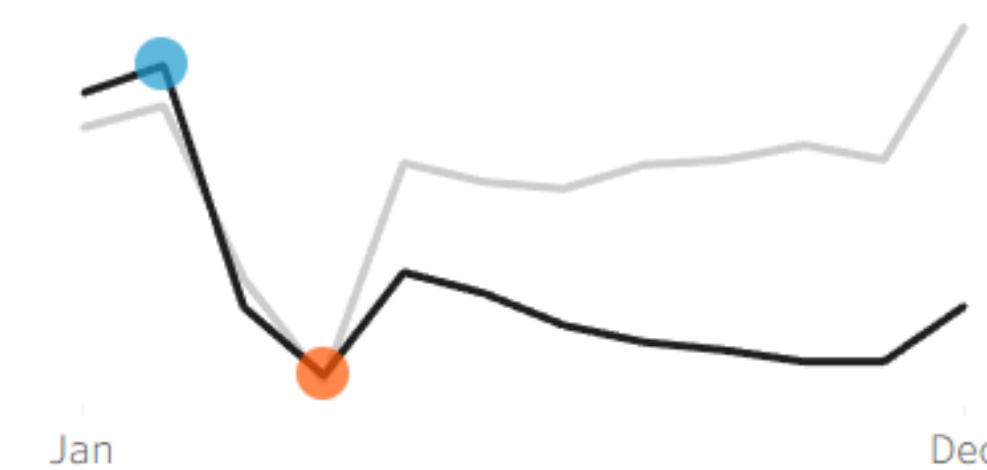
▼ -12.54% vs. PY



Total Quantity

34,463

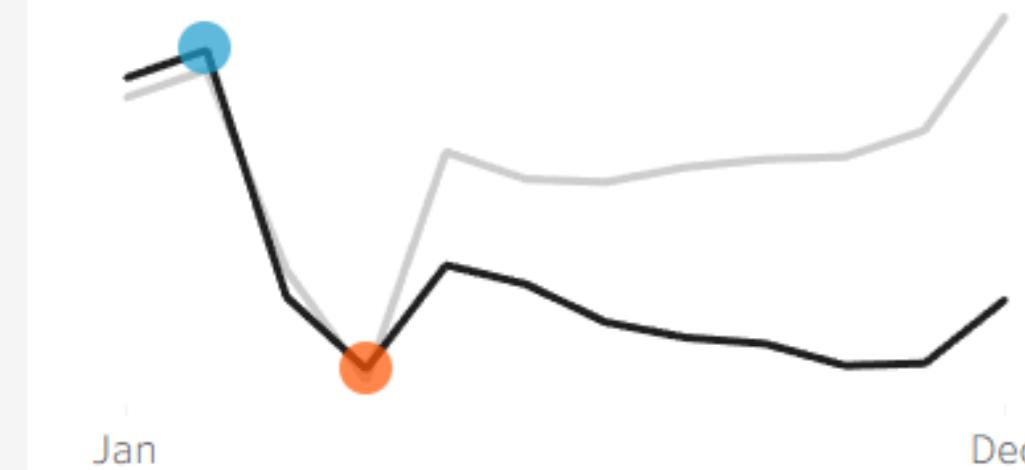
▼ -49.6% vs. PY



Total Profit

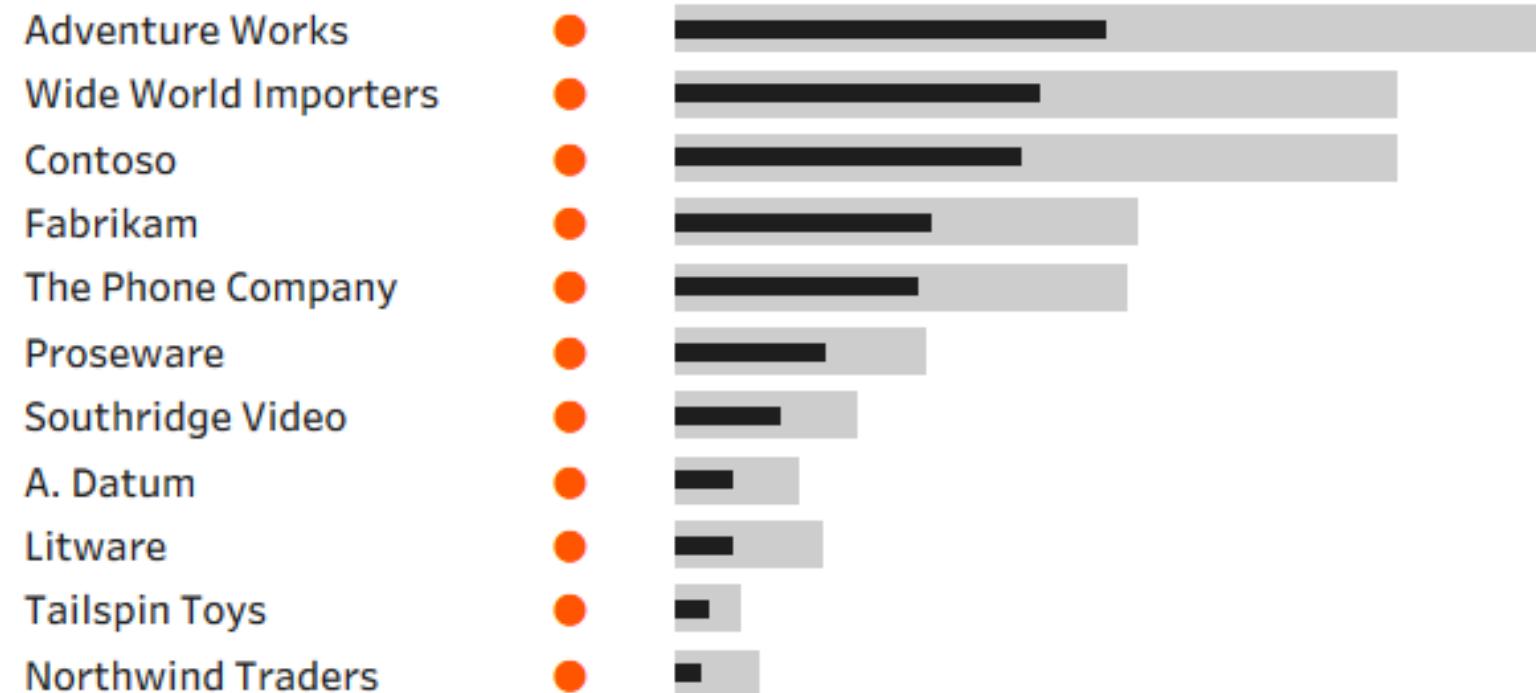
\$5.45M

▼ -49.1% vs. PY



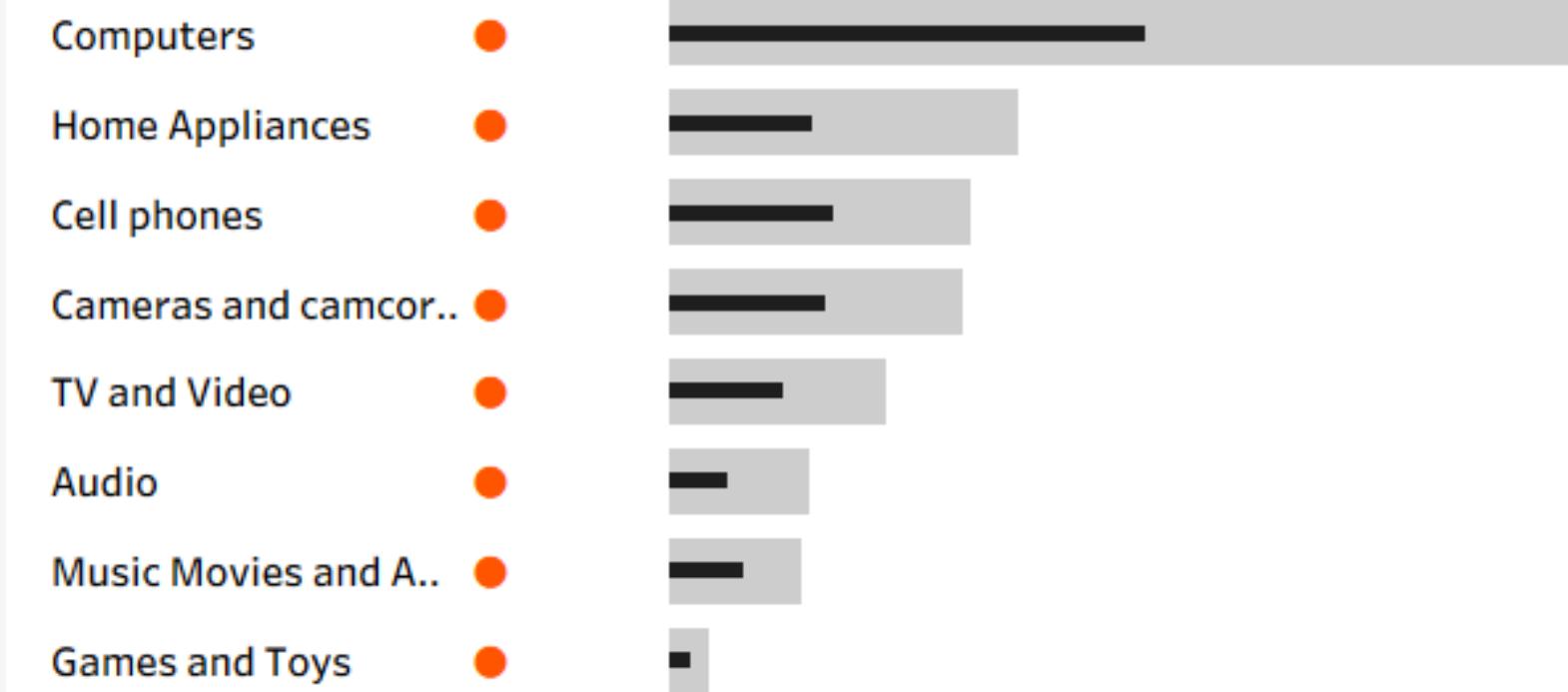
Revenue By Brand

2020 Revenue vs. 2019 Revenue



Revenue By Category

2020 Revenue vs. 2019 Revenue



Products Dashboard | 2020

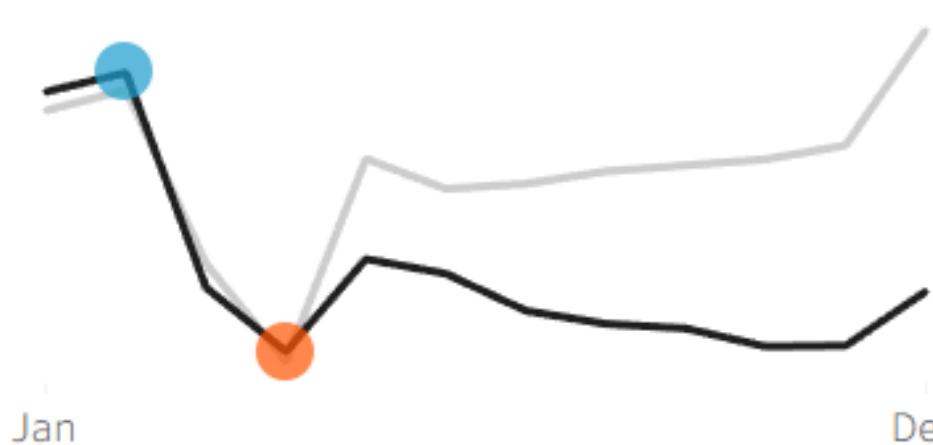


2020 vs. 2019 ● Highest Month ● Lowest Month

Total Cost

\$3.85M

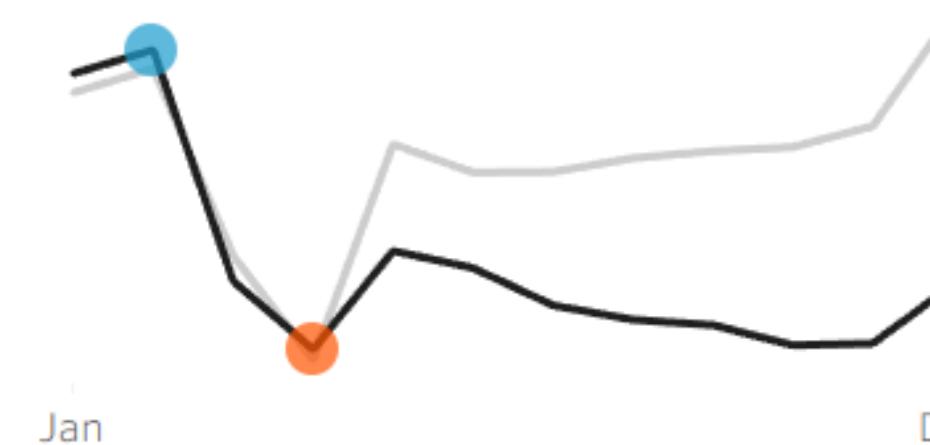
▼ -49.16% vs. PY



Total Sales

\$9.29M

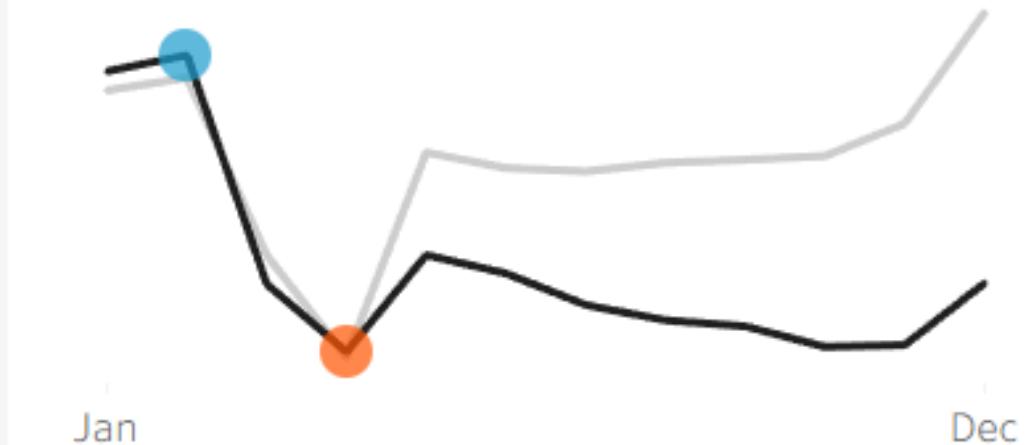
▼ -49.11% vs. PY



Total Tax

\$0.92M

▼ -49.38% vs. PY



Top 20 Product By Revenue

2020 Revenue vs. 2019 Revenue

Adventure Works Desktop PC2.33 ..	●	
Adventure Works Desktop PC2.33 ..	●	
WWI Desktop PC2.33 X2330 White	●	
Adventure Works Desktop PC2.33 ..	●	
WWI Desktop PC2.33 X2330 Black	●	
WWI Desktop PC2.33 X2330 Brown	●	
Adventure Works Desktop PC2.33 ..	●	
WWI Desktop PC2.33 X2330 Silver	●	
Adventure Works Desktop PC2.30 ..	●	
Adventure Works Desktop PC2.30 ..	●	
WWI Desktop PC2.30 M2300 Silver	●	
Proseware Projector 1080p DLP86 ..	●	
WWI Desktop PC2.30 M2300 White	●	

Products Not Sold in | 2020

491

A. Datum Compact Digital Camera M200 Orange	Not Sold	▲
A. Datum Full Frame Digital Camera X300 Pink	Not Sold	
A. Datum Interchangeable lens Non-SLR Digital Camera X250 Bl..	Not Sold	
A. Datum Rangefinder Digital Camera X200 Azure	Not Sold	
A. Datum SLR Camera 35 M358 Gold	Not Sold	
A. Datum SLR Camera 35 X358 Orange	Not Sold	
A. Datum SLR Camera M142 Orange	Not Sold	
A. Datum SLR Camera X136 Silver	Not Sold	
A. Datum Super-zoom Digital Camera X300 Silver	Not Sold	
Adventure Works CRT17 E105 Black	Not Sold	
Adventure Works Chandelier M6150 Blue	Not Sold	
Adventure Works Chandelier M6150 Grey	Not Sold	
Adventure Works Chandelier M6150 Silver	Not Sold	
Adventure Works Chandelier M6150 White	Not Sold	

Customer Dashboard | 2020

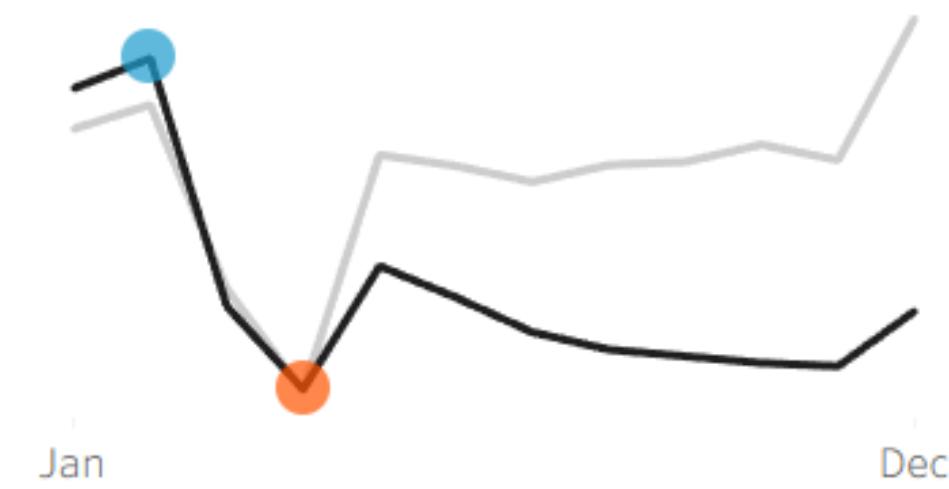


2020 vs. 2019 ● Highest Month ● Lowest Month

Total Customer

3,868

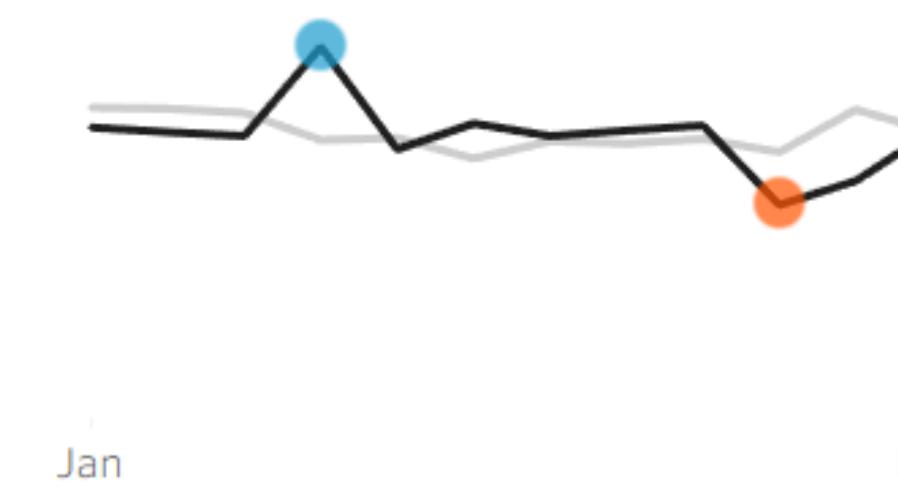
▼ -40.46% vs. PY



Avg Revenue Per Customer

\$2.66K

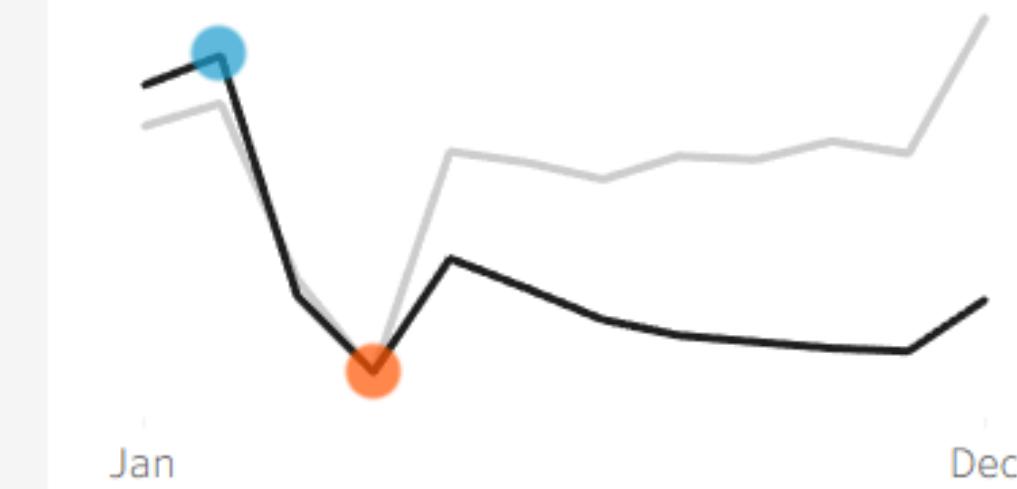
▼ -14.53% vs. PY



Total Orders

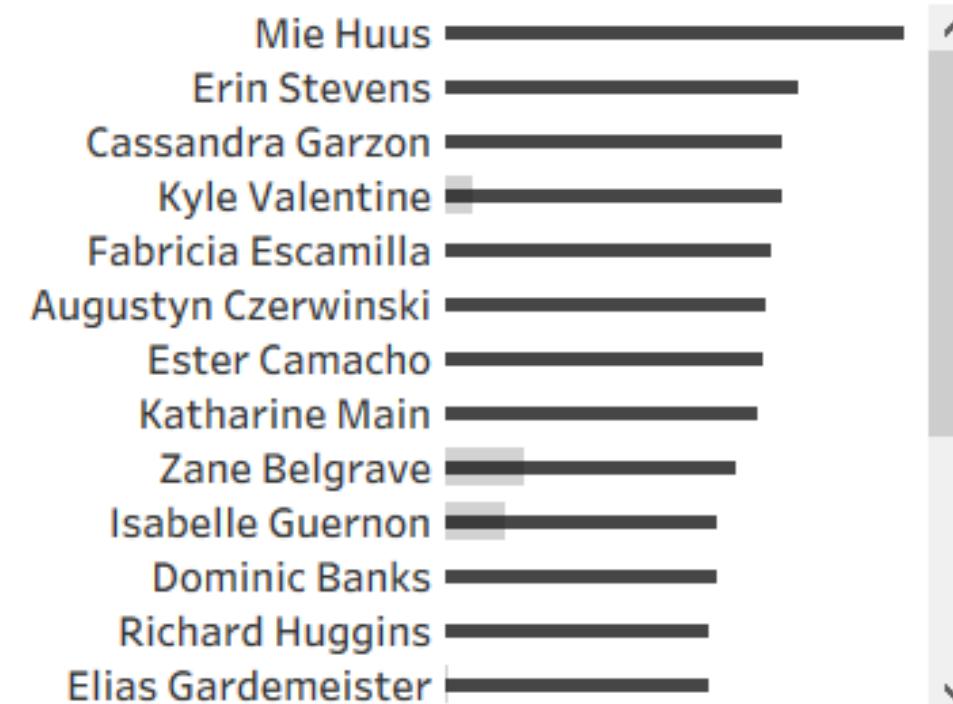
4,635

▼ -48.97% vs. PY



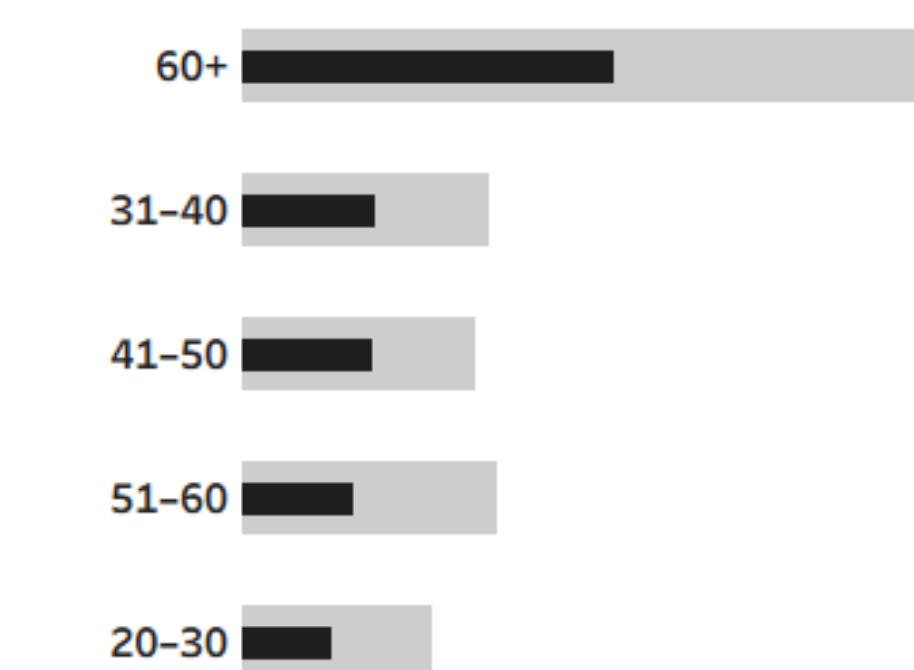
Top 20 Customer

2020 Revenue vs. 2019 Revenue

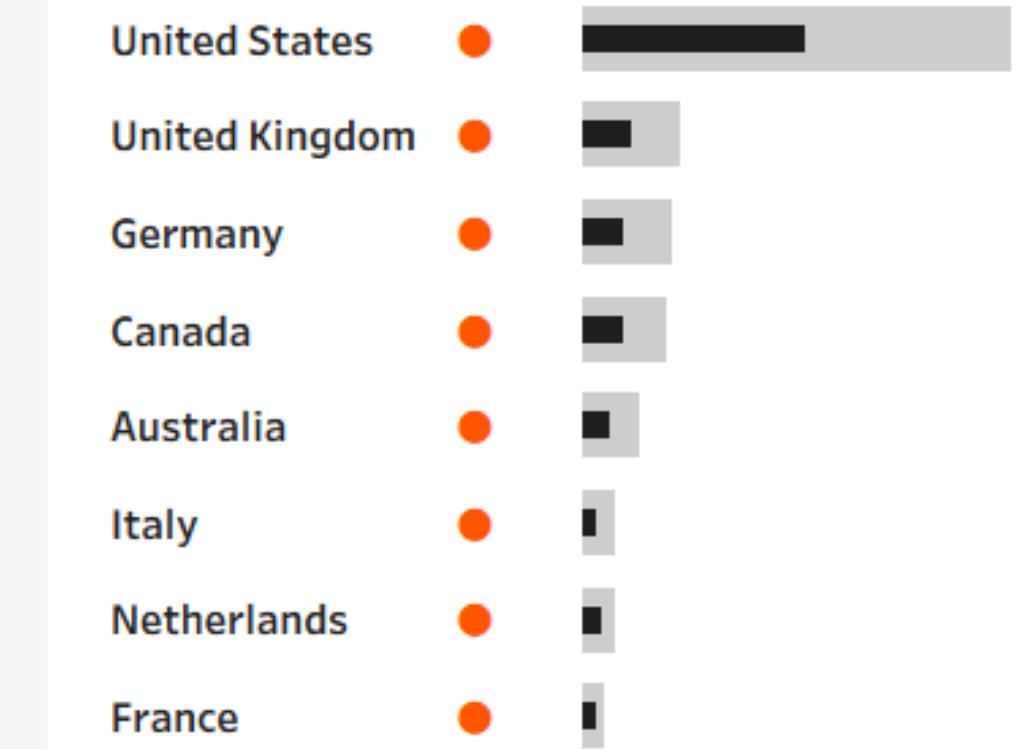


Revenue By Age Group

2020 Revenue vs. 2019 Revenue



Revenue By Country



Online Dashboard | 2020

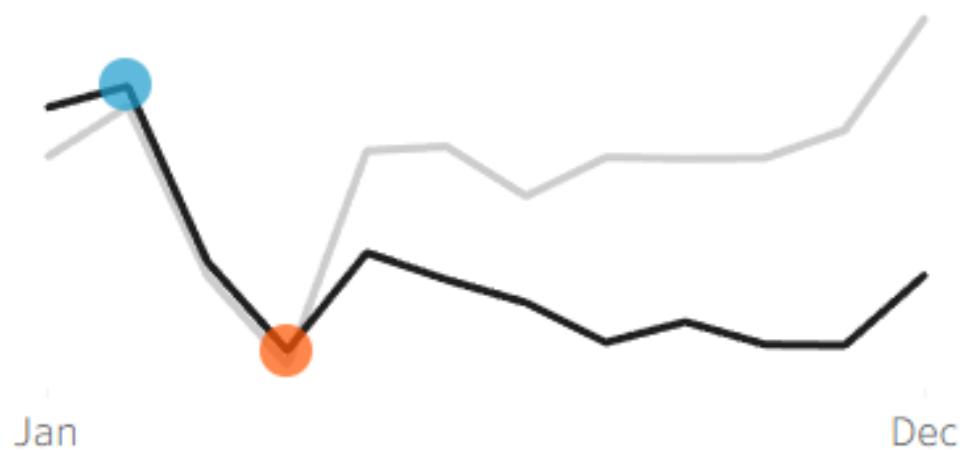


2020 vs. 2019 ● Highest Month ● Lowest Month

Quantity Sold Online

7,718

▼ -47.04% vs. PY



Revenue Online

\$2.365M

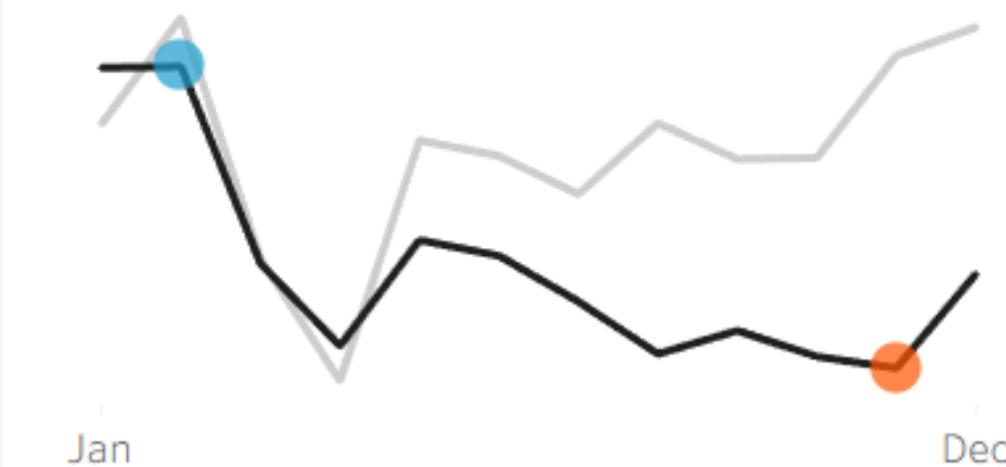
▼ -46.91% vs. PY



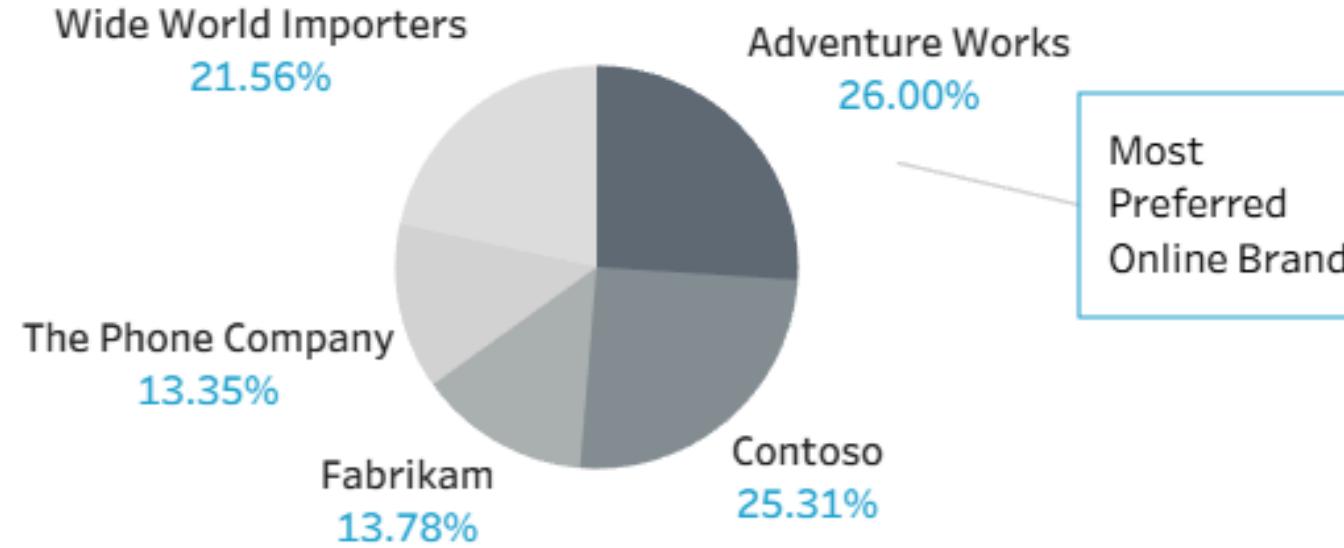
Profit Online

\$1.21M

▼ -47.01% vs. PY



Top 5 Brands Revenue %



Revenue Online By Country

Rank	Country	Revenue Online	Profit Online	Order
#1	United States	\$6,365,856	\$3,325,318	2,852
#2	United Kingdom	\$1,579,556	\$812,880	678
#3	Canada	\$1,455,891	\$749,643	595
#4	Germany	\$1,357,607	\$692,947	540
#5	Australia	\$961,321	\$467,311	369
#6	Italy	\$491,756	\$241,757	211
#7	Netherlands	\$458,844	\$215,360	202
#8	France	\$321,324	\$167,476	133
Grand Total		\$12,992,156	\$6,672,693	5,580



Parto For Smart Decisions



Summary | Dashboard

Welcome Back

Navigation

Overview

Store

Brand

Product

Customer

Filter

0



Year

All

Brand

All

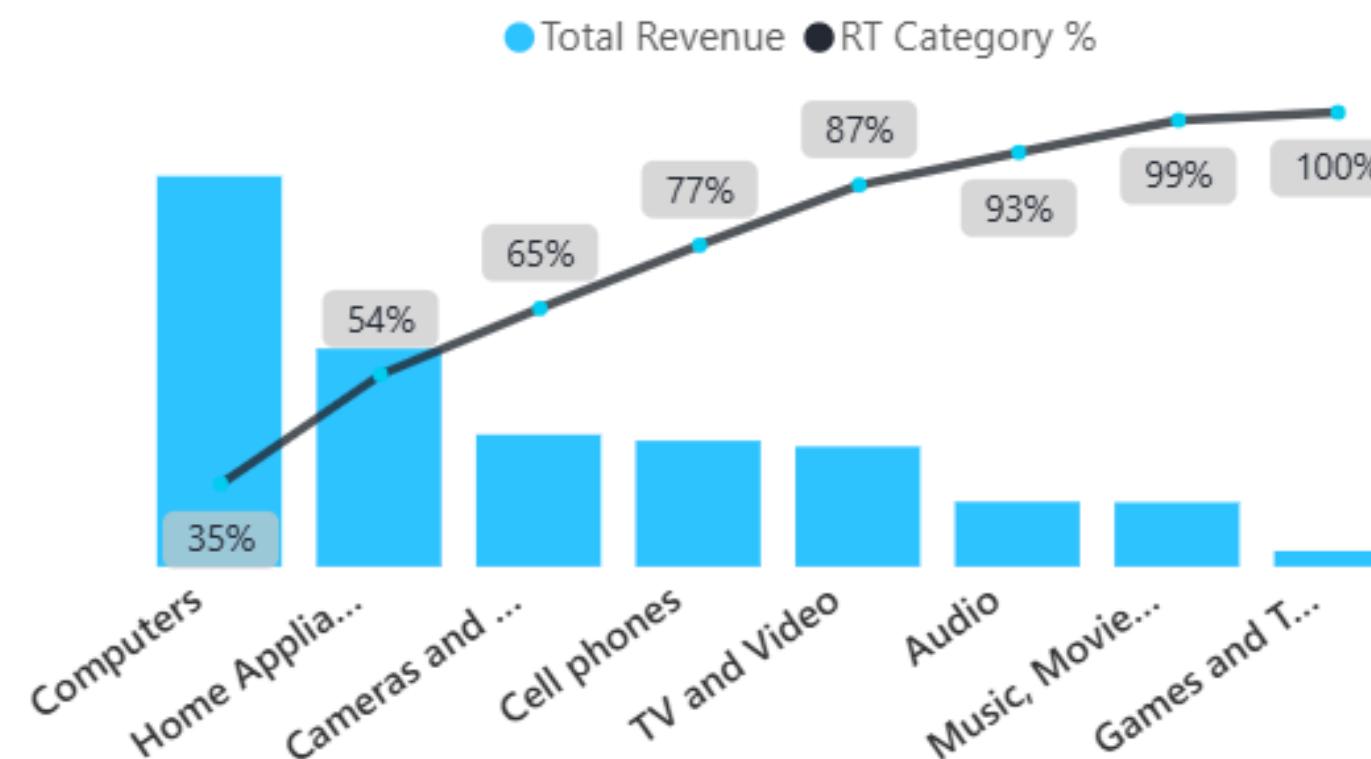
Category, & Sub

All

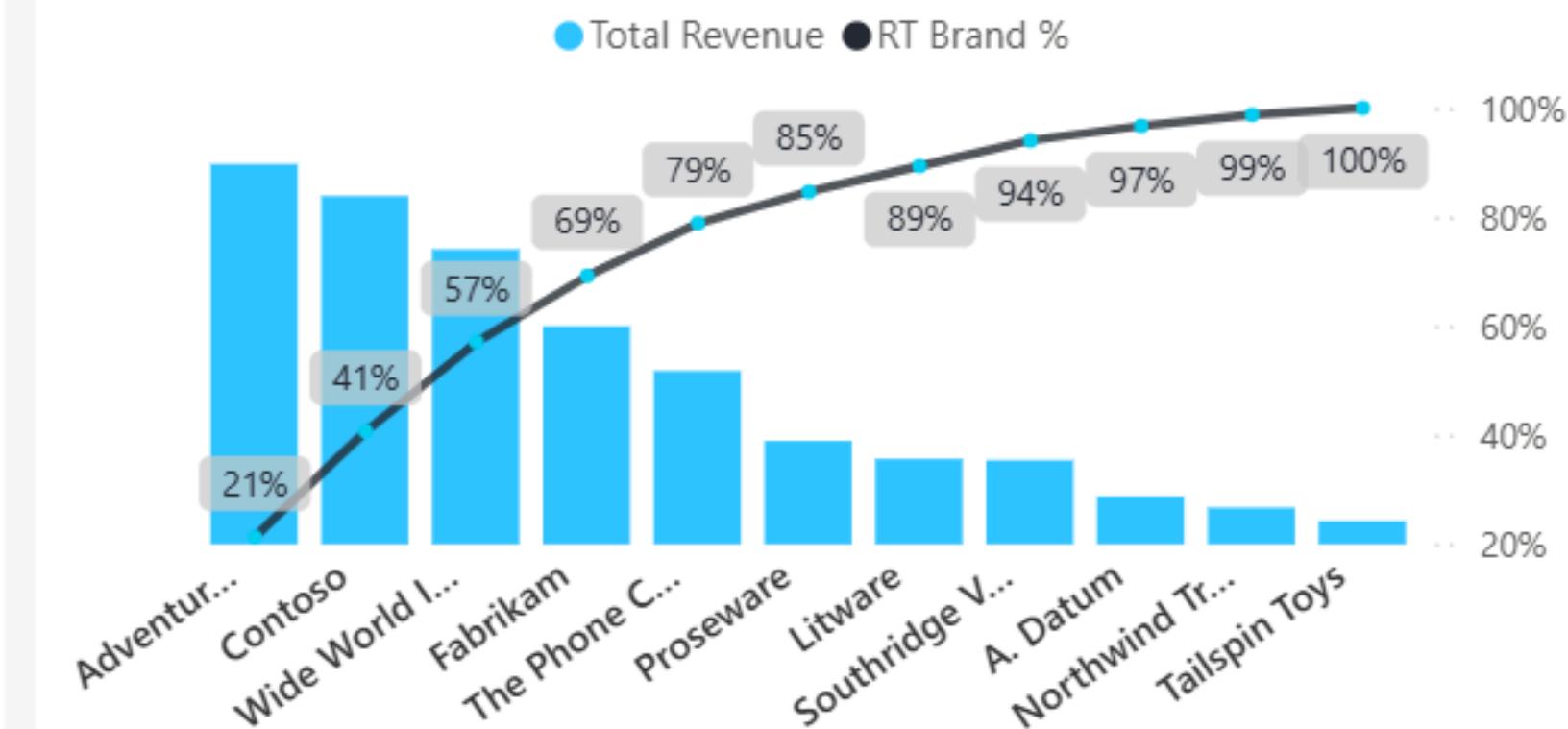
Gender

All

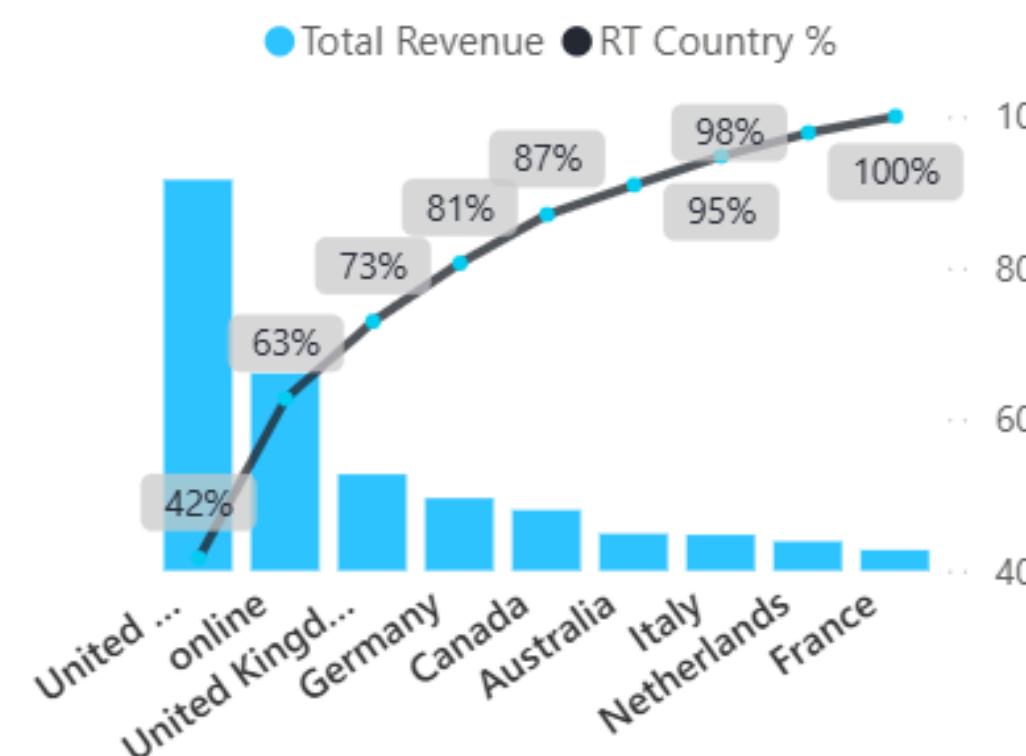
Pareto Analysis of Revenue by Category



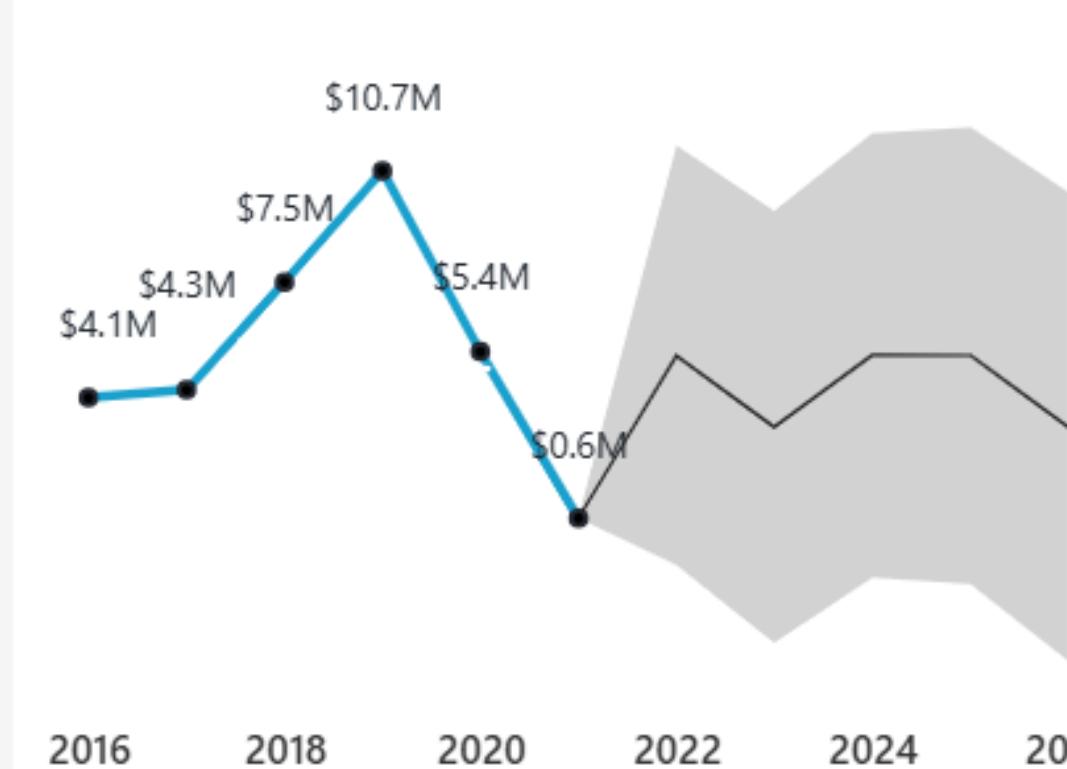
Pareto Analysis of Revenue Brand



Pareto Analysis of Revenue by Country



Net Profit Over Time



Smart Insights

1. Revenue by Category (Top Left):

- **Computers** lead revenue contribution (35%).
- Followed by **Home Appliances** (54% cumulative) and **Cameras & Camcorders** (65%).
- Smaller categories like **Games & Toys** contribute very little.
- Overall, revenue is concentrated in a few major categories.

2. Revenue by Brand (Top Right):

- **Adventure Works** is the top brand (21%).
- **Contoso** and **Wide World Importers** follow (41% and 57% cumulative).
- Other brands like **Tailspin Toys** contribute minimally.
- A few brands dominate the market share.

3. Revenue by Country (Bottom Left):

- **United States** leads with 41.6% of revenue.

AI Product Search System

AI-Powered Product Search System

Advanced product search with AI-powered recommendations using Groq's Llama 3.3 70B

API Setup

Groq API Key

.....

Connect to Groq

Load Model & Data

System Status

Model and data loaded successfully!

- Products: 2517

- Embeddings shape: (2517, 384)

- Available columns: ProductKey, Product Name, Brand, Color, Unit Cost USD, Unit Price USD, SubcategoryKey, Subcategory, CategoryKey, Category, product_info

Smart Search

Search Query

A user-friendly device for everyday use, featuring a strong processor and enough memory to run apps quickly. It has a large, bright screen and fast storage for saving files easily.



Products to Analyze

1 10

Search Method

Cosine Similarity

Euclidean Distance

Get intelligent, conversational responses

Use AI Recommendations

Search Products

Clear

Search Results & AI Recommendations

Your search results will appear here...

Notbooks – colab.google Final Project of predict_Product AI-Powered Product Search

7860-m-s-cz3r54ekhvin-b.europe-west4-1.prod.colab.dev

Smart Search

Search Query

A device that offers good performance for everyday tasks with a powerful processor and 16GB of RAM. It comes with a Full HD display for sharp visuals and a 512GB SSD for fast performance. It also includes multiple connectivity options like USB 3.0 and HDMI.

Products to Analyze

5

1 10

Search Method

Cosine Similarity Euclidean Distance

Get intelligent, conversational responses

Use AI Recommendations

Search Products

Clear

Search Results & AI Recommendations

I've searched our database for a device that matches your requirements, but unfortunately, none of the products I found exactly fit your description. However, I'd like to show you what I did find:

We have several projectors and TVs from Proseware and Adventure Works, including:

1. Proseware Projector 1080p LCD86 White (\$2295.00)
2. Proseware Projector 1080p LCD86 Silver (\$2295.00)
3. Adventure Works 37" 1080p LCD HDTV M150W Black (\$1099.99)
4. Adventure Works 37" 1080p LCD HDTV M150W Silver (\$1099.99)
5. Proseware Projector 1080p DLP86 Silver (\$2499.00)

Based on the products I found, I think the best option would be the Adventure Works 37" 1080p LCD HDTV M150W Black, priced at \$1099.99. Although it's a TV and not a device with 16GB of RAM and a 512GB SSD, it does offer a Full HD display and is a more affordable option.

If you're looking for a device with specific features like a powerful processor, 16GB of RAM, and a 512GB SSD, I apologize that we don't have that product in our database yet. I recommend checking back with us in the future as our inventory is constantly updating.

Technical Details:

- Search method: Cosine Similarity
- Products analyzed: 5
- Top similarity score: 0.4347

Show Sample Queries

Sample Queries

Smart Search

Search Query

A user-friendly device for everyday use, featuring a strong processor and enough memory to run apps quickly. It has a large, bright screen and fast storage for saving files easily.

Products to Analyze

1 10

Search Method

Cosine Similarity

Euclidean Distance

Get intelligent, conversational responses

 Use AI Recommendations

 **Search Products**

 **Clear**

Search Results & AI Recommendations

I think I've found just what you're looking for. We have several products that match your query, but I'd like to recommend the best one among them.

We've found the following products that match your description:

1. The Phone Company Smart phones 8 GB of Memory M400 Gold
2. Contoso Reserve Pen -Tablet Pen E200 Blue
3. The Phone Company Smart phones 8 GB of Memory M400 Pink
4. Contoso Reserve Pen - Tablet Pen E200 Gold
5. The Phone Company Smart phones 8 GB of Memory M400 Grey

Based on your query, I highly recommend **The Phone Company Smart phones 8 GB of Memory M400 Gold**. It has a strong processor, enough memory to run apps quickly, a large and bright screen, and fast storage for saving files easily. This phone is available in Gold, Pink, and Grey colors, all priced at **\$269.00**.

Although the Contoso Reserve Pen is a great product, it's more of a tablet pen and doesn't quite fit your description of a device for everyday use with a strong processor and large screen.

Let me know if you have any other questions or if there's anything else I can help you with!

Technical Details:

- Search method: Cosine Similarity
- Products analyzed: 5
- Top similarity score: 0.3541

 **Show Sample Queries**

Sample Queries

● Tools Used in the Project



Canva





Thank You